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VOLUME 96

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RELATING CHIEFLY TO THE YEAR

1959

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## PREFACE.

THE volumes of the *Zoological Record* have of recent years become so bulky that it has become necessary to alter the format in order to make the volume more convenient for handling. A larger size of page has been adopted with wider columns, which enables a larger number of entries to be printed on a smaller number of pages. It is hoped, too, that the greater column width increases the legibility of each entry.

Volume 96 also brings a second innovation. The *Zoological Record* will no longer be issued as a bound volume but the parts will be supplied to subscribers immediately on publication, thus avoiding considerable delay in the availability of the different sections. In future on the completion of each volume a title page and binding case will be forwarded to subscribers for binding the sections in a single volume. It is hoped that these two changes will increase the usefulness of the *Record* to users.

Volume 96 of the *Zoological Record* deals mainly with the publications of 1959. It includes also those which, for various reasons, were not recorded in previous volumes. Articles and books which have not yet reached this country but concerning which knowledge has been obtained from other sources, are recorded as far as the information permits. They will, if necessary, be dealt with more fully when they can be seen by the recorders.

Section Amphibia contains references to the literature for the year 1958 unavoidably omitted from Volume 95 and it is hoped it will be possible to publish in Volume 97 references to the literature of the Amphibia for both 1959 and 1960.

The compilation of the *Zoological Record* is a heavy task and the Editors and Recorders of the sections deserve the gratitude of zoologists throughout the world for their invaluable services. The Zoological Record Committee expresses its warm thanks to those workers, and to the institutions and individuals listed on page iv for their donations towards the expenses of publishing the volume.

The photo-lithographic reprint of Volumes 1 to 30, containing the literature up to 1893 is now available from Messrs. Butterworths Ltd., and further out-of-print volumes are being reprinted.

L. HARRISON MATTHEWS, Sc.D., F.R.S.,

*Scientific Director,*

The Zoological Society of London.



It will greatly assist in the production and ensure the inclusion of the titles of books and articles in the Record if authors will forward a copy of their paper or memoir to the Editor of the Zoological Record, Zoological Society of London, Regent's Park, London, N.W.1. In the case of separately printed copies of articles so forwarded the original pagination should be given.

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## COMPREHENSIVE ZOOLOGY

COMPILED BY

S. MARKOWSKI, D.Sc.

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# I. Comprehensive Zoology

COMPILED BY  
S. MARKOWSKI, D.Sc.

This section includes works that deal with more than one branch of Zoology, or that are of general interest to zoologists. It is, therefore, not complete in itself as regards any one subject included in it. The special sections complete each subject. A few memoirs included in the special sections are repeated in this section. No attempt is made to include all works on genetics or physiology as these subjects are more suitably covered by the Imperial Bureau of Animal Genetics, *Resumptio Genetica* or *Physiological Abstracts*.

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- Ábrahám, A., Horváth, A. & Megyeri, J. Hydrobiologische Untersuchungen im Wasserspeicher-Gebiet des Baches Szilsvá. *Állat. Közl.* **45** 3-4: 13-24 2 pls. 1 fig. [In Hungarian.]
- Actor, A. B. The formation of animal species. *New Biol.* No. 28: 45-64.
- Adler, S. Darwin's illness. *Nature*, Lond. **184**: 1102-1103.
- Aguirre, E. Londres. Una Exposición sobre la Evolución de los seres vivos. *Bol. Soc. esp. Hist. nat. Secc. Biol.* **56** 1958: 133-144.
- Alba, G. H. de. Humboldt y Mutis. *Rev. Acad. colomb.* **10** 41: XLIX-LVII.
- Albahary, C. & Budker, P. Dangers des animaux aquatiques. *Encyclopédie Médico-Chirurgicale* 16078 C10. Paris 1958. pp. 9, text illust.
- Albert, F. & Lejeune-Ledant, G. Contribution à l'étude des greffes animales. *Bull. Soc. sci. Bretagne* **34**: 333-341.
- Aleinikova, M. M. [Basic results of the studies on soil fauna of the Tatar SSR.] In Aleinikova, M. M. & others. [All-Union conference on soil zoology. Summary of papers.] Moskva 1958.
- (Aleshin, B. V.) [Formation of hormones in the posterior portion of the hypophysis and their role on the activity of adeno-hypophysis.] *Adv. mod. Biol.* **47** 1: 80-99 fig. [In Russian.]
- Aliev, G. A. [Seventieth anniversary and forty-five years of scientific and teaching activities of the academician Eugene Nikanorovich Pavlovski.] *Trud Inst. zool. Parasit. Stalinalbad* **21** 1954: 13-22. [In Russian.]
- Allen, K. R. The distribution of stream bottom fauna. *Proc. N.Z. ecol. Soc.* No. 6 1958: 5-8.
- Alvarado, R. see Moreno, I.
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- Alvarado, R. (1). Algunas consideraciones sobre los estudios de Biología marina en España. *An. Asoc. esp. Progr. Cienc.* **23** 1 1958: 175-184.
- Alvarado, R. (2). El XV Congreso Internacional de Zoología. *Bol. Soc. esp. Hist. nat. Secc. Biol.* **56** 1958: 145-151.
- Alvarado, S. Cien años de darwinismo. *An. Asoc. esp. Progr. Cienc.* **23** 1958: 751-778.
- Amadon, D. Behaviour and classification: Some reflections. *Vjschr. naturf. Ges. Zürich* **104** Festschr. Steiner: 73-78.
- Amann, K. see Bachmann, H.
- Amoureux, L. Quelques enclaves d'eau douce en plein milieu marin. *C.R. Acad. Sci., Paris* **249**: 1406-1409.
- Anderson, E. S. Summary report of work by the Conservation Council of Hawaii. *Proc. 9th Pacif. sci. Congr.* **7**: 15-17.
- Andrewartha, H. G. Water conservation in animals that can live in dry places. *Abstr. Pap. Cent. & Bient. Congr. Univ. Malaya* 1958: 25-26.
- Anfinsen, C. B. The molecular basis of evolution. N.Y.: i-xiii, 1-228 96 figs.
- Anichini, C. Ricerche de biologia marina nei mari circostanti la Sardegna: IV° Variazioni quantitative e qualitative dello zooplancton nelle parte orientale del Golfo di Cagliari nell' anno 1957. *Bull. Inst. oceanogr. Monaco* No. 1133 1958: 1-10 3 pls.
- Anon. (1). [On the works of the Institute of Hydrobiology of the Ukraine Academy of Science.] *Vian. Akad. Nauk Ukraine SSR* **8**: 70. [In Ukrainian.]
- Anon. (2). Forty years of Soviet biology (1917-1957). *Bull. Acad. Sci. URSS Sér. Biol.* **1957** 6 1957: 649-673.
- Anon. (3). [Centenary of Humboldt's death.] *Vestn. Acad. Sci. URSS* **7**: 124-126. [In Russian.]

- Anon. (4). [List of scientific papers published by the staff of the Institute of Biology in 1957.] Bull. Inst. Biol. Minsk 3 1957 : 285-290.
- Anon. (5). [On the scientific work of the third Marine Antarctic expedition.] Vestn. Akad. Nauk SSSR 3 : 110-111. [In Russian.]
- Appleman, P. The logic of evolution: Some reconsiderations. Vict. Stud. Indianapolis 3 1 : 115-125.
- Aráuz, J. Nuestra Portada: Linneo. Bol. inf. Cienc. nac. Quito 10 88 : 414-427.
- (Arnoldi, K. V.) (1). [Problems of soil zoology.] Vestn. Akad. Nauk SSSR 2 : 104-105. [In Russian.]
- Arnoldi, K. V. (2). On the discontinuity of distribution of the populations in a species and on the structure of a biocenose. Proc. int. Congr. Zool. 15 : 781-783.
- Aron, W. The use of a large capacity portable pump for plankton sampling, with notes on plankton patchiness. J. mar. Res. 16 1958 : 158-173 6 figs.
- Arshavsky, I. A. On the nature of the potential differences in connection with an analysis of the electrotonus and of the principal processes in the ontogenesis. Bull. Acad. Sci. URSS Sér. Biol. 1958 1 1958 : 71-78 8 figs.
- Ashton, E. H. & Ververs, H. G. (1). The numbers of exhibits, births and deaths in the menagerie at Regent's Park: 1835-1957, and in Whipsnade Park: 1931-1957. Proc. zool. Soc. Lond. 132 : 489-515 3 figs.
- Ashton, E. & Ververs, H. G. (2). The vital statistics of zoo populations. New Scient. 5 : 838-839 1 fig.
- Bachmann, H. & Amann, K. Friedrich Prem. Schlem-Schr. No. 188 1958 : 13-21.
- Backus, R. H. see Clarke, G. L.
- Bader, R. S. Similarity and recency of common ancestry. Syst. Zool. 7 1958 : 184-187.
- Badinez S., O. Contribucion de la embriologia moderna a la teoria de la evolucion. Biologica, Santiago No. 25 1958 : 35-42 5 figs.
- Baerends, G. P. (1). Comparative methods and the concept of homology in the study of behaviour. Arch. néerl. Zool. 13 Suppl. 1 1958 [1959] : 401-417.
- Baerends, G. P. (2). The value of the concept "releasing mechanism." Proc. int. Congr. Zool. 15 : 821-825.
- Baffoni, G. M. Velocità di sviluppo della retina di vertebrati ed aspetti delle cromatine nei suoi neuroni. Boll. Zool. 24 (2) : 153-164.
- Bailey, E. Charles Lyall, F.R.S. (1797-1875). Notes & Rec. roy. Soc. Lond. 14 1 : 121-138 1 pl.
- Bailey, I. A. E., Edwards, J. S. & Chambers, T. C. The crater lakes of Mayor Island. Tans 7 1957 : 36-46 figs.
- Baker, J. R. Towards a solution of the Golgi problem: Recent developments in cytochemistry and electron microscopy. J. roy. micr. Soc. (3) 77 : 116-129 1 pl. 1 fig. [Not seen.]
- Baker, J. R. & Llowarch, N. The use of the Philips 'mirror-condenser lamp' in microscopy. Quart. J. micr. Sci. 100 : 321-324 1 fig.
- Barigozzi, C. Preformismo e epigenesi nell'evoluzione. Boll. Zool. 24 1957 : 725-735.
- Barker, D. The evolution of stretch receptors in vertebrates. Abstr. Pap. Cent. & Bicent. Congr. Univ. Malaya 1958 : 8-9.
- Barlow, N. Erasmus Darwin, F.R.S. (1731-1802). Notes & Rec. roy. Soc. Lond. 14 1 : 85-98 1 pl.
- Barnabas, J. & T. Lipids in the muscles of some representative type of vertebrates. J. biol. Sci. Bombay 1 2 : 84-87.
- Barnabas, T. see Barnabas, J.
- Barnabash-Nikiforov, I. I. Symbiotic relations of the inhabitants of a beaver burrow. Zool. Zh. 38 : 767-771 1 fig.
- Barnard, J. L. & Hartman, O. The sea bottom off Santa Barbara, California: Biomass and community structure. Pacif. Nat. 1 6 : 1-16 7 figs.
- Barnett, S. A., Editor. A Century of Darwin. London, 1958 : i-xvi, 1-376 figs.
- Barnicot, N. A. Hair. New Biol. No. 28 : 118-133 3 pls. 1 fig.
- Bary, B. M. Temperature-salinity-plankton diagrams: some applications to oceanography and ecology. Proc. int. Congr. Zool. 15 : 283-287 1 fig.
- Barrau, J. Esquisse écologique de la Nouvelle-Guinée. Terre et la Vie 106 : 291-306.
- Barry, T. H. The influence of the concept of transformation on research in the field of comparative anatomy. Pamph. S. Afr. biol. Soc. No. 20 1958 : 30-32.
- Bartholomew, G. A. The role of physiology in the distribution of terrestrial vertebrates. Publ. Amer. Ass. Advanc. Sci. 51 1958 : 81-95.
- Bassot, J.-M. Quelques données histo-chimiques et cytologiques sur les organes photogènes. Proc. int. Congr. Zool. 15 : 709-710.
- Bateman, A. D. Caldas y Humboldt. Rev. Acad. colomb. 10 41 : lxx-lxvii.
- Bates, M. & Humphrey, P. S., Editors. The Darwin Reader. London, 1957 : i-ix, 1-481 illust.
- Batham, E. J. Ecology of southern New Zealand exposed rocky shore at Little Papanui, Otago Peninsula. Trans. roy. Soc. N.Z. 85 1958 : 646-658 3 pls. 4 figs.
- Bé, A. W. H. & others. A quantitative multiple opening-and-closing plankton sampler for vertical towing. J. Cons. Int. Explor. Mer 25 (1) : 36-46 4 figs.
- Beadle, G. W. The physical and chemical basis of inheritance. Eugene, Oregon, 1957 : 1-47 1 fig.
- Beaudette, P. J. see Dawson, E. Y.
- Beck, H. see Kuhnén, H.
- Beklemishev, V. N. (1). Dmitrii Mikhailovich Fedotov. Trud. Inst. Morf. Zhiv. 27 1957 : 5-12 fig.
- Beklemishev, W. N. (2). Populations and micro-populations of parasites and nidicolous. Zool. Zh. 38 (8) : 1128-1137.
- (Bekman, M. Yu) (1). [The Lake ZaghiNuz (Lake Olkhon in the Baikal).] Trav. Baik. Limn. Sta. 17 : 520-530 1 fig. [In Russian.]
- Bekman, M. Yu (2). [Some rules in the distribution and mass appearance of planktonic species in the Baikal Sea.] Trav. Baik. Limn. Sta. 17 : 342-381 10 figs. [In Russian.]
- Belkin, R. I. [The theoretical principles of Darwinism in the interpretation of I. I. Metchnikoff.] Bull. Soc. Nat. Moscou Sér. Biol. 64 4 : 61-73. [In Russian.]
- Bell, P. R., Editor. Darwin's biological work. Some aspects reconsidered. Cambridge : i-xiii, 1-343 illust.



- Benassi, M. (1).** Considerazioni sulla evoluzione cromosomica negli animali. *Boll. Zool.* **24** 1957 : 373-409.
- Benassi, M. (2).** L'ibridazione come metodo di indagine genetica e citogenetica. *Scientia, Bologna* **94** 4 : 83-88.
- Beneker, K.** see Colbert, E. H.
- Benser, S.** On the topology of the genetic fine structure. *Proc. nat. Acad. Sci. Wash.* **45** : 1607-1620 9 figs.
- Bercsik, A.** Neuere hydrobiologische Untersuchungen im thermalen Teich des Lukás-Bades in Budapest. *Allat. Közl.* **45** 3-4 1956 : 35-44. [German summary.]
- (Bergoltz, V. M.)** [Radioactivity and cancer.] *Priroda* **11** : 35-40. [In Russian.]
- Beritov, I. S.** On the perception of objects at a distance in higher vertebrates. *Bull. Acad. Sci. URSS Sér. Biol.* **1958** 5 1958 : 513-532 3 figs. [English summary.]
- Berlioz, J.** Introduction à l'étude du peuplement biologique de la région antillaise. *C.R. Soc. Biogéogr.* No. 308 : 89-91.
- Bernard, F. (1).** Plankton et benthos observés durant trois plongées en Bathyscaphe au large de Toulon. *Ann. Inst. océanogr. Paris N.S.* **35** 4 1958 : 287-326 2 pls. 8 figs.
- Bernard, F. (2).** Contribution du Bathyscaphe aux problèmes de distribution verticale du Plankton marin. *Proc. int. Congr. Zool.* **15** : 211-213.
- Bey-Bienko, G. Ya.** The principle of change of stations and the problem of initial divergence of species. *Proc. int. Congr. Zool.* **15** : 133-136.
- Bibby, C.** Huxley and the reception of the "Origin." *Vict. Stud. Indianapolis* **3** 1 : 76-86.
- Bigelow, R. S.** Classification and phylogeny. *Syst. Zool.* **7** (2) 1958 : 49-59 3 figs.
- Billingham, R. E. & Koprowski, H.** The Wistar Institute of Anatomy and Biology, Philadelphia. *Nature, Lond.* **184** 46-48 : B.A. 6-10 1 fig.
- Birstein, J. A.** Palaeotemperatures and the origin of abyssal fauna. *Priroda* **5** : 21-28 6 figs. [In Russian.]
- Bitterling, R.** Alexander von Humboldt. Zu seinem 100. Todestage. *Kosmos, Stuttgart* **55** 5 : 185-188 2 figs.
- Blackith, R. E.** Nearest-neighbour distance measurements for the estimation of animal populations. *Ecology* **39** 1958 : 147-150.
- Blain, R. L.** see Daniel, J. C.
- Błasnik, H.** Observations on the littoral benthos of Lake Chełmżyńskie. *Zesz. Nauk Univ. Toruń. Nauk Mat.-Przyr.* No. 3 1958 : 37-60. [English summary.]
- Blond, G.** Great migrations. Translated from the French by A. H. Brodrick. London (Hutchinson & Co. Ltd.) 1958 : pp. 224 14 pls. 5 maps.
- (Blyakher, L. Y.)** [Scientific connections of A. O. Kovalevski and I. I. Mechnikov with foreign zoologists and embryologists.] *Trud. Inst. Estest. Tech.* **23** 4 : 93-143. [In Russian.]
- Boam, T. B.** see Thoday, J. M.
- Boell, E. J.** Embryonic energy exchange. In Rudnick, D.: *Embryonic nutrition* (Chicago University Press) 1958 : 1-10.
- Bongard, M. M. & Smirnov, M. S.** Colour vision in man and animals. *Priroda* **5** : 13-20 6 figs. [In Russian.]
- Bonner, J. T.** *Evolution of Development.* Cambridge, 1958 : pp. i-vii, 1-103 33 figs.
- Boros, I. (1).** Kálmán Kittenberger and the Hungarian National Museum—Museum of Natural History. *Ann. hist.-nat. Mus. hung.* **50** 1958 : 11-17 portr.
- Boros, I. (2).** Declaratory resolution of the Conference of Zoologists of the Soviet Union, of people's democracies and of Finland. *Allat. Közl.* **47** 1-2 : 9-16. [English summary.]
- Boros, I. (3).** In commemoration of Kálmán Kittenberger. *Allat. Közl.* **47** 1-2 : 3-8 1 pl. [English summary.]
- Bosch, F. J. G. van den.** A new electro-optical microscope and some of its application to medical and biological research. *Trans. Amer. micr. Soc.* **78** : 345-352 3 figs.
- Boschma, H. (1).** Report on the Standing Committee on Systematic Zoology. *Proc. 8th. Pac. Sci. Congr.* **3A** 1957 : 1495-1509.
- Boschma, H. (2).** A concise review of the scientific activities of C. J. van der Klaauw. *Arch. néerl. Zool.* **13** Suppl. 1 1958 [1959] : 5-9 portr.
- Bossanyi, J.** A simple apparatus for routine zooplankton counts. *J. Cons. int. Explor. Mer* **24** : 452-454.
- Botosăneanu, L., Negrea, St., Burghel, A., Dancău, D. & Decou, V.** Contributions à l'étude hydrobiologique d'une décharge de Dobrogea: la Casimcea. *Arch. Hydrobiol.* **55** : 30-51 3 figs.
- Bourdelle, E.** De la ménagerie du Jardin des Plantes au Parc Zoologique du Bois de Vincennes. *Terre et la Vie* **106** : 322-328.
- Bourlière, F.** Notes de bibliographie écologique (Ire Série). *Terre et la Vie* **106** : 329-337.
- Bowman, R. I.** A plea for an international biological station on the Galapagos Islands. *Proc. int. Congr. Zool.* **15** : 58-60.
- Boyden, A.** Serology as an aid to systematics. *Proc. int. Congr. Zool.* **15** : 120-122.
- Boyden, A. & Paulsen, E.** Serology as an aid to systematics. *Bull. serol. Mus.* No. 22 : 4-8.
- Boyden, A. & Shelswell, E. M.** Phylogeny: Some considerations regarding primitive evolution in lower Metazoa. *Acta Biotheor.* **13** 2-3 : 115-130.
- Brandhorst, W.** Nitrification and denitrification in the Eastern Tropical North Pacific. *J. Cons. Int. Explor. Mer* **25** (1) : 3-20 9 figs.
- Brass, L. J.** Results of the Archbold Expeditions. No. 79. Summary of the Fifth Archbold Expedition to New Guinea (1956-57). *Bull. Amer. Mus. nat. Hist.* **118** 1 : 1-70 8 pls. 1 fig.
- Brattstrom, B. H.** see Richards, A. F.
- Braun, R.** Der Lichtsinn augenloser Tiere. *Umschau* **58** 10 1958 : 306-309 9 figs. [Not seen.]
- Bräuning-Oktavio, H.** Oken und Göttingen. *Ber. naturf. Ges. Freiburg i. Br.* **48** 1 1958 : 5-64 1 fig.
- Bremekamp, G. E. B.** Some comments on the doctrine of evolution. *Proc. Akad. Wet. Amst.* **62C** 5 : 461-471.
- Breton, E.** Contribution à la faunistique des biotopes aquatiques restreints. *Bull. Soc. sci. Bretagne* **34** 1-2 : 33-44 1 fig.
- Bretschneider, L. H.** De submicroscopische organisatie van de cel. *Vakbl. Biol.* **39** 8 : 133-147 17 figs.
- Bridger, R.** Problems in nature conservancy. *Mass. Audubon* **44** (2) : 60-63.
- Brncic, D.** La teoria de la seleccion natural. *Biologia, Santiago* No. 25 1958 : 43-49.

- (Brodski, K. A.) [Zooplankton of the coasts of Southern Sakhalin and of the Southern Kuril Islands.] Issled. Dalnevost. Mor. SSSR 6 2 : 5-46 10 figs. [In Russian.]
- Brongersma, L. G.** The other side of Wallace's Line, general comments on the fauna of New Guinea. Abstr. Pap. Cent. & Bicent. Congr. Univ. Malaya 1958 : 51-52.
- Brown, A. C.** The ecology of South African estuaries. Part IX: Notes on the estuary of the Orange River. Trans. roy. Soc. S. Afr. 35 : 463-473 2 figs.
- Brown, A. W. A.** Physiological mechanisms in evolution of resistance. Proc. int. Congr. Zool. 15 : 497-499.
- Brown, F. A., Jr.** The rhythmic nature of animals and plants. Amer. Scient. 47 : 147-168 9 figs.
- Brown, L.** The publications of the Royal Society. Proc. int. Congr. Zool. 15 : 49-50.
- Brown, W. L.** General adaptation and evolution. Syst. Zool. 7 1958 : 157-168 3 figs.
- Browne, I. A.** Stratigraphy and structure of the Devonian rocks of the Taemas and Cavan areas, Murrumbidgee River, South of Yass, N.S.W. J. roy. Soc. N.S.W. 92 : 115-128 2 pls. map.
- Bruna, M. A.** Na 100 jaar Darwin. Natuurh. Maandbl. Limburg 48 5-6 : 68-69.
- Budker, P.** see Albahary, C.
- Bucher, O.** Das Karyogramm bei verschiedener Wachstumsintensität von Bundgewebekulturen in vitro. Anat. Anz. 106 : 271-284 5 figs.
- Budnitskaya, E. V.** [All-Union Biochemical Society.] Vestn. Acad. Sci. URSS 7 : 101-103. [In Russian.]
- Bulman, O. M. B.** Recent developments and trends in palaeontology. Adv. Sci. 16 62 : 33-42 10 figs.
- Burghele, A.** see Botosăneanu, L.
- Burkill, M. M.** A survey of nature conservation on Singapore Island. Proc. 9th Pacif. sci. Congr. 7 : 34-37 map.
- Burla, H. (1).** Darwin und sein Werk. Gesnerus 15 3-4 1958 : 164-175.
- Burla, H. (2).** Darwin und sein Werk. Neujahrsbl. naturf. Ges. Zürich No. 161 : 1-74 20 figs.
- Butcher, D.** Seeing America's wildlife in our national refuges. New York (Devin-Adair Company) 1955 pp. viii, 338, text illust.
- Butcher, R. W.** Biological assessment of river pollution. Proc. Linn. Soc. Lond. 170 : 159-165.
- Bykov, K. M. (1).** Textbook of physiology. Moscow 1958 : 1-763 324 figs.
- (Bykov, K. M.) (2). The role of the Brain in the control of visceral activity. Priroda 4 : 47-49 fig. [In Russian.]
- Cain, A. J. (1).** Function of taxonomic importance. Publ. Syst. Ass. No. 3 : 5-19.
- Cain, A. J. (2).** Deductive and inductive methods in post-Linnaean taxonomy. Proc. Linn. Soc. Lond. 170 : 185-217 1 fig.
- Cain, A. J. (3).** The post-Linnaean development of taxonomy. Proc. Linn. Soc. Lond. 170 : 234-244.
- Camacho, H. H.** Un siglo de Darwinismo. Holmbergia 6 15 : 65-86.
- Cannon, H. G. (1).** The evolution of living things. Manchester, 1958 : i-x, 1-180.
- Cannon, H. G. (2).** Lamarck and modern genetics. Manchester : i-xii, 1-152.
- Carpine, C.** Campagne 1956 dans le Golfe de Guinée et aux Îles Principe, São Tomé et Annobin. 3. Aperçu sur les peuplements littoraux. Ann. Inst. Océanogr. Paris N.S. 37 4 : 75-90 4 figs. 2 maps.
- Carrie, B. G. A.** Notes on the counting and mounting of planktonic organisms. J. roy. micr. Soc. (3) 78 : 77.
- Carruthers, J. N.** The new marine biological station of Heligoland. Nature, Lond. 184 : 400-403 2 figs.
- Carter, G. S.** Inbreeding and evolution. Abstr. Pap. Cent. & Bicent. Congr. Univ. Malaya 1958 : 6.
- Carter, G. S.** A hundred years of evolution. London, 1958 : i-x, 1-206.
- Caspers, H.** Vorschläge einer Brackwassernomenklatur ("The Venice System"). Int. Rev. Hydrobiol. 44 : 313-315.
- Cassie, R. M. (1).** The sampling problem, with particular reference to marine organisms. Proc. N.Z. ecol. Soc. No. 4 1957 : 37-39 2 figs.
- Cassie, R. M. (2).** Apparatus for investigating spatial distribution of plankton. N.Z. J. Sci. 1 1958 : 436-448 2 figs.
- Cassie, R. M. (3).** Micro-distribution of plankton. N.Z. J. Sci. 2 : 398-409.
- Castro Faria, L. de.** A arte animalista dos paleo-amerindios do litoral do Brasil. Publ. avuls. Mus. nac. Rio de J. No. 24 : 1-15 22 pls.
- Chambers, T. C.** Marine zonation on Marotiri Island. Tane 7 1957 : 16-22 2 figs.
- Chambers, T. C.** see Bailey, I. A. E.
- (Chapinski, B.) [Vith Congress of the Polish Parasitological Society.] Vestn. Akad. Nauk SSSR 4 : 102-103. [In Russian.]
- Charlesworth, J. K.** Recent progress in Irish geology. Irish Nats'. J. 13 3 : 49-65.
- (Chesnokov, E. N.) [V. I. Lenin, and the contemporary Natural Sciences.] Vestn. Akad. Nauk SSSR 5 : 22-29. [In Russian.]
- (Chesnokov, E. N. & Troshin, D. M.) Philosophical problems in natural Science to-day. Priroda 4 : 53-58. [In Russian.]
- Chèvremont, M. & others.** Action de désoxyribonucléases neutre et acide sur des cellules somatiques vivantes cultivées *in vitro*. III. Etude histautoradiographique après incorporation de thymidine tritiée. Discussion et conclusions des trois parties. Résumé général. Arch. Biol., Paris 70 : 833-849 2 pls.
- Chipman, W. H. & others.** Uptake and accumulation of radioactive zinc by marine plankton, fish, and shellfish. Fish. Bull. U.S. 58 (135, 1958 : 279-292 1 fig.
- Chopard, L.** Résultats biologiques des campagnes du bathyscaphe F.N.R.S. III. Nature, Paris No. 3289 : 224-226 8 figs.
- (Chzhu-Ke-Chzhen.) [The results of the great tasks.] Priroda 9 : 11-24 fig. [In Russian.]
- Čížek, F.** Charles Darwin a problém realnosti druhu. Biológia, Bratislava 14 : 641-651.
- Clark, R. B.** see Haderlie, E. C.
- Clarke, G. L. & Backus, R. H.** Measurements of light penetration in relation to vertical migration and record of luminescence of deep-sea animals. Deep-Sea Res. 4 1 1956 : 1-14 11 figs. [Not seen.]
- Clayton, R. M.** Labelled antibodies in the study of differentiation. Proc. int. Congr. Zool. 15 : 730-733.

- Cleemput, G. van.** La richesse de la Bibliothèque de la Société Royale de Zoologie d'Anvers. Zoo, Antwerp 25 : 60-63 3 figs.
- Coiffat, H.** Énumération des grottes visitées. Arch. Zool. exp. gén. 97 : 209-465.
- Colbert, E. H. & Beneker, K.** The Paleozoic Museum in Central Park, or the museum that never was. Curator 2 : 137-150 7 figs.
- Cole, G. A.** Studies on a Kentucky Knobs Lake. III. Some qualitative aspects of the net plankton. Trans. Ky. Acad. Sci. 18 4 1957 : 88-101.
- Collis-George, N.** The physical environment of soil animals. Ecology 40 : 550-557 2 figs.
- Colon, G.** Biozoografía de las Baleares. Palma de Mallorca, 1957 : 1-568 figs.
- Colosi, G.** Neodarwinismo ed ologismo. Boll. Zool. 25 1958 [1959.] : 127-147.
- Colton, J. B.** The multiplane kite-otter as a depressor for high-speed plankton samplers. J. Cons. Int. Explor. Mer 25 : 29-35 4 figs.
- Conklin, E. G.** A brief history of the Society. Yearb. Amer. phil. Soc. 1958 1959 : 36-62.
- Conover, J. T. & Pierce, M. E.** An adhesive for labelling animals exposed to sea-water over long periods. Nature, Lond. 178 : 273-274.
- Cooke, W. B.** Tricking filter ecology. Ecology 40 : 273-291 7 figs.
- Coolidge, H. J. (1).** Notes on progress in wildlife conservation in the United States. Proc. 9th Pacif. sci. Congr. 7 : 38-40.
- Coolidge, H. J. (2).** Report of the Chairman of the Standing Committee on Pacific conservation. Proc. 9th Pacif. sci. Congr. 7 : 1-4.
- Coolidge, H. J. (3).** The growth and development of international interest in safeguarding endangered species, with special reference to the role of the Survival service of the International Union for the Conservation of Nature and Natural Resources. Proc. int. Congr. Zool. 15 : 56-58.
- Cooper, L. H. N.** Some chemical and physical factors controlling the biological productivity of temperate and tropical oceanic waters. Proc. 8th Pac. Sci. Congr. 3A : 1157-1163.
- Cope, J. B.** A history of the Joseph Moore Museum at Earlham College. II. Later and present history. Proc. Ind. Acad. Sci. 68 : 313-315.
- Costa, S.** Quelques observations sur les périodes de reproduction de divers invertébrés sur les fonds à *Halarachtrion* de la région de Marseille. Vie et Milieu 10 : 195-197.
- Costello, D. P.** Some problems of American zoological publication. Proc. int. Congr. Zool. 15 : 51-52.
- Cotti, G.** La grotte de Ticino. II. Boll. Soc. ticin. Sci. nat. 52 1957 : 7-36.
- Cousin, G.** Maurice Caullery, 1868-1958. Bull. biol. 93 : 1-6 portr.
- Cousyn, S.** see Sills, B.
- Cowan, I. McT.** Conservation in Canada 1953-1957. Proc. 9th Pacif. sci. Congr. 7 : 13-14.
- Cowles, R. B.** Additional notes on the origin of the tetrapods. Evolution 12 1958 : 419-421.
- Cragg, J. B.** Biological studies in the Antarctic regions. New Biol. No. 29 : 102-123 3 figs.
- Crescitelli, F.** The natural history of visual pigments. Biol. Colloq. Corvallis No. 19 1958 : 30-51 15 figs.
- Crisp, D. J.** The influence of climatic changes on animals and plants. Geogr. J., Lond. 125 : 1-19 6 figs.
- Critchley, R. A.** "Operation Noah." Oryx 5 : 100-107.
- Croizat, L.** Panbiogeography 3 vol. 1958.
- Cullen, J. M.** Behaviour as a help in taxonomy. Publ. Syst. Ass. No. 3 : 131-140.
- Cushing, D. H.** The seasonal variation in oceanic production as a problem in population dynamics. Proc. int. Congr. Zool. 15 : 805-807.
- Cycin, N. V.** Charles Darwin and some problems of biology. Bull. Acad. Sci. Moscou Sér. Biol. No. 6 : 832-838. [English summary.]
- Czapik, A.** Einfluss der Teichdünung auf die Entwicklung des Zooplanktons. Biul. Zakl. Biol. Staw. Polek. Akad. Nauk No. 5 1957 : 71-96. [Polish with German, summary.]
- Dajoz, R.** La mer Noire, la Caspienne et leurs annexes. Année Biol. (3) 35 1952 : 5-41 7 figs.
- Daleq, A. M.** Introduction to general embryology. Translated by J. Medawar. Oxford, 1957 : i-vii, 1-177.
- Dancău, D.** see Botosăneanu, L.
- Daniel, J. C. Jr. & Blain, R. L.** Background radiation and endemic faunal range in the San Luis Valley of Southern Colorado. Gt. Basin Nat. 19 1 : 37-42 4 figs.
- Darling, F. F.** The significance of predator-prey relationships in the regulation of animal population. Proc. int. Congr. Zool. 15 : 62-63.
- Darlington, P. J., Jr. (1).** Area, climate and evolution. Evolution 13 : 488-510 8 figs.
- Darlington, P. J., Jr. (2).** Darwin and zoogeography. Proc. Amer. phil. Soc. 103 : 307-319 2 figs.
- Darwin, C. G.** Some episodes in the life of Charles Darwin. Proc. Amer. phil. Soc. 103 : 609-615.
- Dauvillier, A.** L'origine photochimique de la vie. Paris, 1958 : 1-214 25 figs.
- Davies, J. T. & Taylor, F. H.** The role of adsorption and molecular morphology in olfaction: the calculation of olfactory thresholds. Biol. Bull. Woods Hole 117 : 222-238 6 figs.
- Davies, T. G. H.** A technique for the perfusion of small animals. Stain Technol. 34 : 169-171 2 figs.
- Davis, D. D.** The proper goal of comparative anatomy. Abstr. Pap. Cent. & Bicent. Congr. Univ. Malaya 1958 : 6-7.
- Dawson, E. W.** Prof. E. Percival. Nature, Lond. 184 : 403.
- Dawson, E. Y. & Beaudette, P. T.** Field notes from the 1959 eastern Pacific cruise of the Stella Polaris. Pacif. Nat. 1 13 : 3-24 16 figs.
- Day, J. H.** The biology of Langebaan Lagoon: A study of the effect of shelter from wave action. Trans. roy. Soc. S. Afr. 35 : 475-547 7 figs.
- Debauche, H. R.** Problèmes de biocénétique. Rev. Quest. sci. 129 1958 : 58-89 4 figs. [Not seen.]
- De Beer, G. (1).** Some unpublished letters of Charles Darwin. Notes & Rec. roy. Soc. Lond. 14 1 : 12-66 1 pl. 1 fig.
- De Beer, G. (2).** Darwin's Journal. Bull. Brit. Mus. (nat. Hist.) Hist. Ser. 2 1 : 1-21.

- De Beer, G. (3).** Darwin's notebooks on transmutation of species. *Bull. Brit. Mus. (nat. Hist.) Hist. Ser.* 2: 2: 23-73 3 figs.
- de Beer, G. (4).** Paedomorphosis. *Proc. int. Congr. Zool.* 15: 927-930.
- Decou, V.** see Botosăneanu, L.
- Degerbel, M.** On post-glacial subspecific differentiation in Danish vertebrates. *Proc. int. Congr. Zool.* 15: 152-154.
- Dely, O. G., Gozmány, L. & Horváth, L.** The results of the Zoological Collection, Trip to Egypt in 1957, of the Natural History Museum, Budapest. 1. Preliminary report. *Ann. hist. nat. Mus. hung.* 50 1958: 131-133.
- Denton, D. A. & Sabins, J.** The biochemical determination of behaviour. *Proc. int. Congr. Zool.* 15: 849-851.
- Deraniyagala, P. E. P.** Eudelin de Jonville's three illustrated manuscript volumes on Ceylon of 1801. *Spolia zeylan.* 28 2 1958: 219-221.
- (Dershavin, A. N., Kasimov, A. G., Zhuraviev, M. V. & Likhodeeva, N. F.)** [Material on the hydrobiology of the upper Silvan zone of Azerbaidzhan.] *Trud. Inst. Zool. Azerbaidzhan S.S.R.* 20: 139-189. [In Russian.]
- (Detlaf, T. A.)** [New trends in the work of Chinese embryologists.] *Vest. Akad. Nauk SSSR* 10: 64-67. [In Russian.]
- Deveze, L.** Cycle biologique des eaux et écologie des populations planctoniques. *Rec. Trav. Sta. mar.* Endoume No. 25: 1-220.
- Dick, W. E.** Darwin. *Discovery* 20 11: 482-487 1 fig.
- Ditchburn, R. W.** Effect of small involuntary eye-movements on visual perception, including experiments on visual performance when movements of the retinal image are excluded. *Proc. int. Congr. Zool.* 15: 882-884.
- Dobrokhotov, V. N.** see Lioznor, L. D.
- Dobzhansky, T.** Variation and evolution. *Proc. Amer. phil. Soc.* 103: 252-263.
- Dorst, J.** Quelques affinités de la faune des îles Galapagos. *C.R. Soc. biogéogr.* 36 314: 57-60.
- Dougherty, E. C.** Introduction to Axenic culture of invertebrate Metazoa: A goal. *Ann. N.Y. Acad. Sci.* 77 2: 27-54.
- Drach, P.** Méthodes et plan de travail pour l'exploration biologique en scaphandre autonome. *Proc. int. Congr. Zool.* 15: 254-257.
- Drift, J. van der.** The role of the soil fauna in the decomposition of forest litter. *Proc. int. Congr. Zool.* 15: 357-360.
- (Drosdova, T. V.)** [Chitin and its transformations in natural processes. The formation of melanoidins.] *Adv. mod. Biol., Moscow* 47: 277-296 9 figs. [In Russian.]
- Duarte-Bello, P. P.** Experiencias con el empleo de equipo oceanográfico en el Golfo de Batabano. *Monogr. Lab. Biol. mar., Habana Monogr.* 4 1958: 5-30 15 figs.
- Dullemeijer, P.** The mutual structural influence of the elements in a pattern. *Arch. néerl. Zool.* 13 Suppl. 1 1958 [1959]: 74-88.
- Dupree, A. H.** The first Darwinian debate in America: Gray versus Agassiz. *Daedalus* 88: 560-569.
- (Dayuban, N. A.)** [Zooplankton of the water-reservoirs of the Lenin Canal Volga-Don according the material for 1954 and in the three years of its existence.] *Biolog. Sta. Borok* 3 1958: 226-235. [In Russian.]
- Ebert, J. D. (1).** Antigens as tracers of embryonic synthesis. *In Rudnick, D.: Embryonic nutrition* (Chicago University Press) 1958: 54-71.
- Ebert, J. D. (2).** Protein synthesis and macromolecular transfer in development. *Proc. int. Congr. Zool.* 15: 621-622.
- Edwards, J. S.** see Bailey, I. A. E.
- Ehrlich, P. R.** Problems of higher classification. *Syst. Zool.* 7 1958: 180-184.
- Eichfeld, J.** Michurin's ideas and the development of biology in the U.S.S.R. *Eesti N.S.V. Tead. Akad. Touin. Biol. Ser. No. 1* 1956: 5-17 1 pl. [English summary.]
- Eiseley, L. C.** Charles Darwin, Edward Blyth, and the theory of natural selection. *Proc. Amer. phil. Soc.* 103: 94-158 1 fig.
- Ellegård, A.** Darwin and the general reader. *Acta Univ. Gotheburg* 64 1958: 1-304.
- Ellis, D. V.** The benthos of soft sea-bottom in Arctic North America. *Nature, Lond.* 184: B.A. 79-80.
- Elpiner, I. E. & Sokolskaia, A. V.** The effect of ultrasound on some proteins and aminoacids as related to the nature of the gas present. *C.R. Acad. Sci. U.R.S.S.* 123 4 1958: 659-662. [In Russian.]
- Elsasser, W. M.** The physical foundation of biology. An analytical study. London, etc. 1958: i-x, 1-219.
- Elton, C. S.** The ecology of invasions by animals and plants. London, 1958: 1-181 33 pls. 51 figs.
- Emelianov, S. V.** Heterochronics in the appearance of the anlage of organs of vertebrates and their role in the process of evolution. *Proc. int. Congr. Zool.* 15: 108-110.
- Engel, H. & Stock, J. H.** Obituary. Anna Petronella Cornelia de Vos. Amsterdam 14 I 1893-Loosdrecht 21 III 1958. *Hydrobiologia* 12: 393-395 portr.
- Enghusen, E. von.** Über die Entwicklung des Retikulins *in vitro*. *Acta anat.* 36 (4): 264-274 6 figs.
- (Epshtein, Y. A.)** [Dependence of the electrolytic composition of blood and tissues on the exchange of matter.] *Adv. mod. Biol., Moscow* 47: 297-310. [In Russian.]
- Epstein, H. A.** The fine structure of animal cells; a brief introductory survey. *J. Linn. Soc. (Zool.)* 44 (296): 153-163 8 pls.
- Eriksen, C. H.** A comparative study of the standing crops of the mat-edge fauna of three bog lakes. *Pap. Mich. Acad. Sci.* 44: 97-110 1 fig.
- (Erman, L. M. & Gerasimova, M. M.)** [Bibliography of the Kirgizian Academy of Sciences publications published in the year 1957.] *Izv. Akad. Nauk Kirgiz S.S.R. nat. techn.* 1 1: 145-165. [In Russian.]
- Evans, F.** Wind currents, tidal streams and plankton off the Northumberland coast. *J. mar. biol. Ass. U.K.* 38: 529-541 7 figs.
- Evans, H. E.** Some comments on the evolution of the Arthropoda. *Evolution* 13: 147-149.
- Exner, R.** Das Gehirn bei Tier und Mensch. *Veröff. naturh. Mus. Wien N.F. Nr. 2*: 1-10.
- Fábán, G.** Methodological problems in genetical research. *Acta biol. hung. Suppl. No. 3*: 9-11.
- Page, L.** Les campagnes scientifiques du *Bathyscaphe F.N.R.S.* III 1954-1957. *Proc. int. Congr. Zool.* 15: 209-211.

- Fager, E. W.** Determination and analysis of recurrent groups. *Ecology* 38 1957 : 586-595 1 fig.
- Falla, R. A. (1).** Ecological aspects of Antarctic biology. *Proc. N.Z. ecol. Soc. No. 4* 1957 : 1-5.
- Falla, R. A. (2).** Conservation in New Zealand. *Proc. 9th Pacif. sci. Congr.* 7 : 24-25.
- Fatt, P.** The intracellular microelectrode. *Proc. int. Congr. Zool.* 15 : 744-745.
- (Fedorov, A. F.)** The natural radioactivity of marine organisms. *Priroda* 4 : 86-88. [In Russian.]
- Fedorowicz, Z.** Ludwik Henryk Bojanus. *Memor. zool. No. 1* 1958 : pp. 46 figs. [In Polish with German summary.]
- Fedotov, D. M. (1).** Modern approach to the development of the problem of animal evolution and phylogeny. *Zool. Zh.* 38 : 1443-1455.
- (Fedotov, D. M.) (2).** A la mémoire du B. N. Schvavitch. *Trud. Leningr. Soc. Nat.* 70 1 : 14-16 photo. [In Russian.]
- Fedotov, D. M. (3).** Modern methods of developing the problems of animal evolution and phylogeny. *Proc. int. Congr. Zool.* 15 : 950-952.
- Filios, F. P.** The effect of wastes on the distribution of bottom invertebrates in the San Francisco Bay estuary. *Wasmann J. Biol.* 17 1 : 1-17 1 fig.
- Fischer, W. L.** Critical notes on evolution. *Muenchen*, 1957 : 1-111.
- Fisher, L. A. & Kon, S. K.** Vitamin A in the invertebrates. *Biol. Rev.* 34 : 1-36 3 figs.
- Fischer-Piette, E.** Contribution à l'écologie intercotidale du Détroit de Gibraltar. *Bull. Inst. océanogr. Monaco* No. 1145 : 1-32 4 figs.
- Fleming, C. A.** Darwinism in New Zealand: Some examples, influences and developments. *Roy. Soc. N.Z. Proc.* 86 1958 : 65-86 9 figs.
- Flew, A. G. N.** The structure of Darwinism. *New Biol.* No. 28 : 25-44.
- Ford, C. E.** Tracing cell movements and cell lineages by chromosome "markers." *Proc. int. Congr. Zool.* 15 : 633-635.
- Ford, E. B.** The study of rapid evolution. *Proc. int. Congr. Zool.* 15 : 170-171.
- Forest, J.** Campagne 1956 dans le Golfe de Guinée et aux Îles Principe, São Tomé et Annobin. I. Introduction. *Ann. Inst. Océanogr. Paris N.S.* 37 4 : 3-36 3 pls. 2 figs.
- Fosberg, F. R.** Conservation situation in Oceania. *Proc. 9th Pacif. sci. Congr.* 7 : 30-31.
- Fourche, J.** see Nigon, V.
- (Frank, G. M.)** [Physics and chemistry in biological research.] *Priroda* 1 : 65-72 5 figs. [In Russian.]
- Fraser, R. C.** Cytodifferentiation: Protein synthesis in transition. *Amer. Nat.* 93 868 : 47-80 1 fig.
- Fraser, A. J. & Waring, H.** Rottnest Island: The Rottnest Island Biological Station and recent scientific research. *J. roy. Soc. W. Aust.* 42 3 : 65-66.
- Fraser, J. F. D.** The sexual cycles of vertebrates. *London (Hutchinson University Library)* : pp. 168, text illust.
- Frebold, H.** The Jurassic system in northern Canada. *Trans. roy. Soc. Can. (3)* 52 4 1958 : 27-37.
- Fredericks, K.** A definition of ecology and some thoughts about basic concepts. *Ecology* 39 1 1958 : 154-159.
- Freuchen, P. & Salomonsen, F.** The Arctic Year. *London* : 1-440 figs.
- Frey, H.** Das Aquarium von A bis Z. 2. Auflage. *Radebeul (Neumann Verlag)* : pp. 600 64 pls. (24 col.) text-figs.
- Fujii, S.** Morphological observations on various spermatozoa with a new staining method. *J. Fac. Fish. Hiroshima Univ.* 2 (1) 1958 : 87-92 4 pls.
- Gabrielson, I. N.** Wildlife conservation. Second edition. *New York (Macmillan Company)* : pp. xii, 244 32 pls. text maps.
- Gaillard, J.-M.** Quelques animaux marins ayant récemment atteint les côtes de Bretagne. *Penn ar Bed* No. 16 : 6-9 2 figs.
- Gaissinovitsh, A. E.** Elie Metchnikov et le Darwinisme. *Proc. int. Congr. Zool.* 15 : 110-113.
- Gajevskaja, N. S.** Sur l'étude quantitative de l'alimentation des animaux aquatiques. *Proc. int. Congr. Zool.* 15 : 769-772.
- Gallan, H. G.** Lampbrush chromosomes. *Proc. int. Congr. Zool.* 15 : 739-741.
- Gauckler, K. (1).** Pflanzenwelt und Tierleben in den Landschaften am Nürnberg-Erlangen. *Abh. naturh. Ges. Nürnberg. Jubiläumsband 1951* : 1-51 12 figs. 4 maps.
- Gauckler, K. (2).** Die Gipshügel in Franken, ihr Pflanzenkleid und ihre Tierwelt. *Abh. naturh. Ges. Nürnberg* 29 1 1957 : 1-92 17 figs. 9 maps.
- Gautin, A. R.** Production of bottom fauna in the Provo River, Utah. *Iowa St. Coll. J. Sci.* 33 : 395-419 2 figs.
- Geiser, S. W. (1).** Men of science in Texas, 1820-1880. *Fld. & Lab.* 26 1958 : 86-139.
- Geiser, S. W. (2).** Men of Science in Texas, 1820-1888. II. *Fld. & Lab.* 27 : 20-48.
- Geiser, S. W. (3).** Men of Science in Texas, 1820-1880: IV. *Fld. & Lab.* 27 : 111-160.
- Georgi, J.** Professor Rv. Fritz Ahlborn, ein vergessener Pionier der Strömungsforschung. *Abh. Verh. naturw. Ver. Hamburg N.F.* 2 1958 : 5-18 2 figs.
- Gerasimova, M. M.** see Erman, L. M.
- Gerasimov, V. V.** see Mironov, N. V.
- Germaine, L. A. P.** La faune des lacs, des étangs et des marais de l'Europe occidentale. 2me édition révisée ... par E. Séguay. *Encyclopédie Pratique du naturaliste*, Tome XX. *Paris (Editions Paul Lechevalier)* 1957 : pp. x, 549 32 col. pls. text illust.
- Gersch, M. (1).** Neurohormone bei wirbellosen Tieren. *Verh. dtsh. zool. Ges.* 1958 (1959) : 40-76 19 figs.
- Gersch, M. (2).** Neurohormone bei wirbellosen Tieren. *Umschau* 59 6 : 173-176 7 figs. [Not seen.]
- Ghilarsv, M. S.** [Fundamental problems in the study of soil invertebrates and of soil zoology.] In Aleinikova, M. M. & others: All-Union conference on soil zoology, summary of papers. *Moscow* 1958 : 28-29.
- Ghiță, S.** Bucharest: A hundred years from the appearance of Darwinism. *Natura, București* 11 2 : 5-19 portr. [English, summary.]



- Ghosez, J. P. La microscopie de fluorescence dans l'étude du remaniement haversien. Arch. Biol. Paris 70 (2) : 169-178 1 pl.
- Giesb., E. Nyanskaffet zoologisk og botanisk litteratur på Statsbiblioteket i Århus. Flora og Fauna 65 : 98-101.
- Gillispie, C. C. Lamarck and Darwin in the history of science. Amer. Scient. 46 1958 : 388-409.
- (Gilyarov, M. S.) [Principles in the changes of the body and of physiology in Arthropoda, when changing to the terrestrial mode of life.] Trud. Inst. Morf. Zhiv. 27 : 118-133. [In Russian.]
- Glass, B., Temkin, O. & Straus, W. L., jr., Editors. Forerunners of Darwin: 1745-1859. Baltimore : 1-471.
- Glouchchenko, I. E. Lucien Daniel et l'état actuel du problème de l'hybridation, végétation des plantes et des animaux. Bull. Soc. sci. Bretagne 34 : 253-277.
- Godlewski, H. [The development and achievements of histochemistry.] Folia Morph. Warszawa 9 (2) 1958 : 93-125 14 figs.
- Gorbunova, M. A. see Lugovoi, A. E.
- Gordon, M., Editor. Pigment cell biology. N.Y. : i-xiv, 1-647 illust.
- Govorov, G. G. see Yakovlev, V. G.
- Gozmány, L. see Dely, O. G.
- (Graevski, E. Y. & Shapiro, I. M.) [On the destruction and recovery of cells in an affected organism by ionizing radiation.] Adv. mod. Biol. Moscow 47 : 185-203. [In Russian.]
- Grainger, E. H. The annual oceanographic cycle at Igloodik in the Canadian arctic. 1. The zooplankton and physical and chemical observations. J. Fish. Res. Bd. Can. 16 : 453-501 12 figs.
- Grainger, E. H. & Hunter, J. G. Station list of the 1955-58 field investigations of the Arctic unit of the Fisheries Research Board of Canada. "Calanus" series No. 19. J. Fish. Res. Bd. Can. 16 : 403-420 11 figs.
- Grassé, P. P. L'ultrastructure et la polarité de l'appareil de Golgi. Proc. int. Congr. Zool. 15 : 738-739.
- Grell, R. F. The Dubinin effect of the  $\gamma$  chromosome. Genetics 44 : 911-922 1 fig.
- Grigoriev, A. A. An outstanding naturalist and geographer [Alexander Friedrich Wilhelm Humboldt]. Priroda 5 : 66-73. [In Russian.]
- (Grigyalis, A. T.) (1). [Zoobenthos of the lake Shvugin and its dynamics.] Trud. Akad. Nauk Lith. SSR ser. B 4 (20) : 231-237. [In Lithuanian with Russian summary.]
- Grigyalis, A. T. (2). [Benthos in some lakes of the north-western part of Lithuania.] Trud. Akad. Nauk Lithuan. SSR. ser. B 3 (19) : 191-201 4 figs. [In Russian.]
- Grzybowska, B. The bottom fauna of the barrage reservoir at Rożnów. Biul. Zakł. Biol. Staw. Polsk. Akad. Nauk No. 5 1957 : 97-117 2 figs. [Polish with English summary.]
- Guhl, E. Humboldt y nosotros. Rev. Acad. colomb. 10 41 : xlv-xlviii.
- Güler, E. R. The intertidal ecology of the Montemar area, Chile. Pap. roy. Soc. Tasm. 93 : 165-183 3 pls. 20 figs.
- Gunter, G. & Shell, E. W., jr. A study of an estuarine area with water level control in the Louisiana Marsh. roc. La Acad. Sci. 21 1958 : 5-34 3 pls.
- (Guryanova, E. F.) [Marine zoological expedition to the island Khainan.] Vestn. Akad. Nauk SSSR 3 : 89-92. [In Russian.]
- Gusev, A. V. & Pasternak, F. A. Some remarks concerning the bottom fauna of Antarctic waters. C.R. Acad. Sci. URSS 123 1958 : 841-844 map. [In Russian.]
- Gijzen, A. L'élevage en captivité d'animaux rares ou en voie d'extinction. Un aspect de la justification de l'existence de jardins zoologiques. Zoo, Antwerp 25 : 26-32 17 figs.
- Haarlev, N. The diameters of cavities ( $> 0.1$  mm.) in the soil and the area of their surrounding walls, seen in relation to the microarthropods present. Proc. int. Congr. Zool. 15 : 360-363 2 figs.
- Habakkuk, H. J. Thomas Robert Matthews, F.R.S. (1766-1834). Notes & Rec. roy. Soc. Lond. 14 1 : 99-108 1 pl.
- Habe, T., Kuroda, T. & Miyadi, D. Some problems on marine biogeographical microprovinces surrounding Japan. Proc. 8th Pac. Sci. Congr. 3 1957 : 493-498.
- Haberman, H. Über die Anwendung der Ideen von Mitschurin auf dem Gebiete der ökologischen Zoogeographie. Eesti N.S.V. Tead. Akad. Torin. Biol. Ser. No. 1 1956 : 29-47 9 figs. [German summary.]
- Haderlie, E. C. & Clark, R. B. Studies on the biology of the Bristol Channel. XIX. Notes on the intertidal fauna of some sandy and muddy beaches in the Bristol Channel and Severn Estuary. Proc. Bristol Nats. Soc. 29 5 : 459-468 1 fig.
- Hadorn, E. Zur Problematik der Dominanz. Vjschr. naturf. Ges. Zürich 104 Festschr. Steiner : 227-235 2 figs.
- Hagbarth, K. E. Principles of neural control of receptors. Proc. int. Congr. Zool. 15 : 880-882.
- Hairton, N. G. Species abundance and community organization. Ecology 40 : 404-416 7 figs.
- Haldane, J. B. S. (1). Les aspects physico-chimiques des instincts. Instinct, Paris 1956 : 545-559.
- Haldane, J. B. S. (2). The theory of natural selection to-day. Abstr. Pap. Cent. & Bicent. Congr. Univ. Malaya 1958 : 1-2.
- Haldane, J. B. S. (3). The theory of natural selection to-day. Nature, Lond. 183 : 710-713.
- Hale, A. J. The interference microscope in cytological research. Proc. int. Congr. Zool. 15 : 737-738.
- Halstead, B. W. Dangerous marine animals. Cambridge, Maryland, U.S.A. (Cornell Maritime Press) : pp. [xiv], 146 frontis. col., text illust.
- Hamburger, V. Physiological correlations in neuroblast differentiation. Proc. int. Congr. Zool. 15 : 608-610.
- Hammen, C. S. & Osborne, P. J. Carbon dioxide fixation in marine invertebrates: A survey of the major phyla. Science 130 : 1409-1410.
- Hardy, A. C. The open sea: its natural history. Part 2. Fish and fisheries. With chapters on whales, turtles and animals of the sea floor. London (Collins, New Naturalist series No. 37) : pp. xiv, 322, 48 pls. (16 col.), text illust.
- Hartman, O. see Barnard, J. L.
- Harris, E. The nitrogen cycle in Long Island Sound. Bull. Bingham oceanogr. Coll. 17 1 : 31-65 5 figs.
- Harrison, G. A. Environmental determination of the phenotype. Publ. Syst. Ass. No. 3 : 81-86.
- Harrison, J. H. The origin of isolation. New Biol. No. 28 : 65-91.

- Harrison, T. (1).** In the footsteps of Alfred Russell Wallace. Abstr. Pap. Cent. & Bicent. Congr. Univ. Malaya 1958 : 4-5.
- Harrison, T. (2).** Fauna of the Great Cave, Niah, Borneo. Abstr. Pap. Cent. & Bicent. Congr. Univ. Malaya 1958 : 27.
- Harrison, T. (3).** Conservation in the Island of Borneo. Proc. 9th Pacif. sci. Congr. 7 : 11-12.
- Harvey, W.** De motu locali animalium 1627. Edited, translated and introduced by G. Whitteridge. London (Cambridge University Press) : pp. x [ii], 163, frontis.
- Heberer, G. (1).** Charles Darwin. Sein Leben und sein Werk. Stuttgart : 1-80 23 figs.
- Heberer, G. (2).** Charles Robert Darwin. Naturwissenschaften 46 : 241-248 2 figs.
- Hebborn, P.** The matching of drugs to tumours. Proc. int. Congr. Zool. 15 : 745-746.
- Hediger, H.** Instinkt and territorium. Instinct, Paris 1956 : 521-545 9 figs.
- Helmcke, J. G.** Schmelzstrukturen von Wirbeltierzähnen in stammesgeschichtlicher Sicht. Verh. dtsch. zool. Ges. 1958 [1959] : 314-326.
- Hendrickson, W. B.** Natural science and urban culture in the nineteenth century Middle West. Trans. Acad. Sci. St. Louis 31 9 : 231-248.
- Heptner, V.** Centres of speciation in the fauna of the Palaearctic desert and Steppe zone. Proc. int. Congr. Zool. 15 : 155-157.
- Hess, E. H.** An effect of early experience, imprinting determines later social behaviour in animals. Science 130 : 133-141 10 figs.
- Heuvelmans, B.** Dans le sillage des monstres marins. I. Le kraken et le poulpe colossal. [Paris] (Librairie Plon) 1958 : pp. [vi], 498 30 pls. text illust.
- Heywood, V. H.** The taxonomic treatment of ecotypic variation. Publ. Syst. Ass. No. 3 : 87-112.
- Hida, T. S.** see King, J. E.
- Hiller, S.** Advances of the electron microscopy. Folia Morph. Warszawa 9 (1) 1958 : 15-26 4 figs. 2 pls.
- Himmelfarb, G.** Darwin and the darwinian revolution. London i-ix, 1-422.
- Ho, R.** The evolution of the Indo-Malayan region. Abstr. Pap. Cent. & Bicent. Congr. Univ. Malaya 1958 : 3-4.
- Hobday, G. I.** Boots' new biological research laboratory. Nature, Lond. 184 : 1274-1275 1 fig.
- Hodgkin, E. P. (1).** Recent zoological research in Western Australia. C.R. 3rd Congr. Ass. Sci. Pays Océan Indien Sect. B 1958 : 57-60.
- Hodgkin, E. P. (2).** Catastrophic destruction of the littoral fauna and flora near Fremantle, January. W. Aust. Nat. 7 1 : 6-11.
- Hodgkin, E. P. (3).** History of the Rottnest Biological Station. J. roy. Soc. W. Aust. 42 3 : 68-69.
- Hodgkin, E. P. & Marsh, L. M.** On the significance of a tropical element in the littoral fauna of south-western Australia. C.R. 3rd Congr. Ass. Sci. Pays Océan Indien Sect. B 1958 : 61.
- Hoeker, S. G.** Las contribuciones de Darwin y Wallace al pensamiento biológico moderno. Biologica, Santiago No. 25 1958 : 51-54.
- Holdgate, M.** Mountains in the Sea, London, 1958 pp. i-xvi, 1-222 illust.
- Holland, C. H., Lawson, J. D. & Walsley, V. G.** A revised classification of the Ludlovian succession at Ludlow. Nature, Lond. 184 : 1037-1039.
- Holme, N. A.** A hopper for use when sieving bottom samples at sea. J. mar. biol. Ass. U.K. 38 : 525-529 2 figs.
- Holthius, L. B. H. E. van Rijgersma**—a little-known naturalist of St. Martin (Netherlands Antilles). Naturw. Stud.-Suriname Ned. Antillen No. 19 : 69-78.
- Hooijer, D. A.** The Pleistocene vertebrate fauna of Celebes. Arch. néerl. Zool. 13 Suppl. 1 1958 [1959] : 89-96.
- Hopwood, A. T.** The development of pre-Linnean taxonomy. Proc. Linn. Soc. Lond. 170 : 230-234.
- Horváth, L.** Zoological collecting expedition of the Hungarian Museum of Natural Sciences in Egypt. Allat. Kozl. 47 1-2 : 99-101. [English summary.]
- Horváth, A.** see Abraham, A.
- Horváth, L.** see Dely, O. G.
- Hoy, J.** A portable conductivity bridge for field use. J. Fish. Res. Bd. Can. 16 (3) : 381-382 3 figs.
- Hoyle, G.** The meaning and significance of neuromuscular facilitation. Proc. int. Congr. Zool. 15 : 459-461.
- Hromada, J.** [Receptors of the joint capsule and some open questions of their investigation.] Folia Morph. Warszawa 9 (2) 1958 : 127-131 7 figs.
- Humphrey, P. S.** see Bates, M.
- Hunter, J. G.** see Grainger, E. H.
- Hutchinson, G. E. & MacArthur, R. H.** A theoretical ecological model of size distributions among species of animals. Amer. Nat. 93 869 : 117-125 4 figs.
- Huxley, J. (1).** Clades and grades. Publ. Syst. Ass. No. 3 : 21-22.
- Huxley, J. (2).** The emergence of Darwinism. Proc. int. Congr. Zool. 15 : 11-29.
- Hyman, L. H.** The invertebrates. 5. New York (McGraw Hill Book Co.) pp. viii, 783, text illust.
- Hynes, H. B. N.** The use of invertebrates as indicators of river pollution. Proc. Linn. Soc. Lond. 170 : 165-169.
- Illies, J. & Schwabe, G. H.** Limnologie und Ökologie. Biol. Zbl. 78 : 391-396.
- Imbrie, J.** see Menzies, J. R.
- Imbrie, J.** see Newell, N. D.
- Inger, R. F.** Comments on the definition of genera. Evolution 12 1958 : 370-384 3 figs.
- Ionescu, M. & Radu, V.** Le développement des recherches de la faune dans la République Populaire Roumaine. Proc. int. Congr. Zool. 15 : 966-967.
- Ionescu-Varo, M.** The cell. Natura, București 11 1 : 91-104 8 figs.
- Isakova, O. V.** see Shikhobalova, N. P.
- Ito, H.** Quantitative studies on the rate of cell production in the thymolymphatic organs. I. A simple method for determination of the mitotic index in suspension of cell nuclei. Okajimas Folia Anat. Jap. 33 (5-6) : 275-280 1 pl.
- Ivanov, K. P.** [On temperature gradients in the artificial freezing of the organism in mammals.] Priroda 8 : 93-94. [In Russian.]

- (Ivanov, A. V. & Strelkov, A. A.) [Invertebrates of economic importance from the far-eastern seas.] A description of their structure and an atlas of anatomy. Vladivostok 1949 pp. 101 29 pls. [In Russian.]
- Ivanov, D. P. see Tuzava, R. V.
- (Ivanova-Kazas, O. M.) (1). [The origin and evolution of the spiral cleavage.] Trud. Leningr. Soc. Nat. 70 : 44-48. [In Russian.]
- Ivanova-Kazas, O. M. (2). On the origin and evolution of the spiral cleavage. Vestn. Leningr. Univ. No. 9 : 56-67 5 figs. [English summary.]
- Ivlev, V. S. Experiment on the evaluation of the evolutionary value of the energetic metabolism levels. J. gen. Biol., Moscow 20 : 94-103.
- Jablokoff-Khazorian, S. M. Considérations sur la méthode historique en Zoogéographie. Zool. Zh. 38 : 497-508. [In Russian with French summary.]
- Jackman, L. A. J. Marine aquaria. London (Cassell & Co., Ltd.) 1957 : pp. xiv, 138 4 pls. text illust.
- Jadina, T. G. see Virketis, M. A.
- Jam L., P. Expedición al Territorio Amazona. Mem. Soc. Cienc. nat. La Salle 18 70 1958 : 77-89 figs.
- Janetschek, H. Über die tierische Wiederbesiedlung im Hornken-Vorfeld (Zillertaler Alpen). Schlern Schr. No. 188 1958 : 209-246 5 figs.
- Janse, A. J. T. A short history of the S.A. Biological Society 1908-1958. Pamphl. S. Afr. biol. Soc. No. 20 1958 : 35-42.
- Janus, H. Von der Ordnung im Tier- und Pflanzenreich. Mikrokosmos 48 9 : 283-286.
- Jashnov, W. A. A new model of a volume meter for a rapid and precise plankton evaluation under field conditions. Zool. Zh. 38 (11) : 1741-1753.
- Jeannel, R. Sur la distribution transatlantique de certaines espèces de la faune antillaise. C.R. Soc. Biogéogr. No. 309 92-96.
- Jost, A. Le rôle des glandes endocrines dans le développement de l'embryon. Proc. int. Congr. Zool. 15 : 579-582.
- Jovanović, R. N. Trias- und Jura-sedimente in der Randzone der roten Sandsteinserie von Krepoljin-Castobrodica. Posebna Izd. Srpsk. Akad. Nauk No. 308 1958 : 1-115 37 figs., map. [German summary.]
- Kaiser, E. & Michl, H. Die Biochemie der tierischen Gifte. Wien (Franz Deuticke) 1958 : pp. viii, 258 23 figs.
- Kalchev, L. A. The intensity of phosphorus metabolism in carbohydrate and lipid-protein fractions in the state of hysteriosis. C.R. Acad. Sci. URSS 123 6 1958 : 1133-1136 2 graphs. [In Russian.]
- Kalk, M. The geographical composition of the intertidal fauna at Inhaca Island, Mocambique. S. Afr. J. Sci. 55 7 : 178-180.
- Källén, B. Embryological aspects of the concept of homology. Ark. Zool. 12 : 137-142.
- Kalmus, H. The role of genes in life. Acta Biotheor. 13 2-3 : 107-114.
- Kalugina, N. S. On the method of sorting hydrobiological material. Trud-Vses. Gidrobiol. Obsch. 9 : 391-393 2 figs.
- Kamshilov, M. M. Interrelations of organisms and their role in evolution. J. gen. Biol., Moscow 20 : 370-378 3 figs. [English summary.]
- (Kandelaki, T. A.) (1). [On the problem of the chemical immunity of leucocytes.] Soob. Akad. Nauk Gruz. SSR 22 2 159-162. [In Russian.]
- (Kandelaki, T. A.) (2). [On the chemical immunity of the tissue-ferments.] Soob. Akad. Nauk Gruz. SSR 23 2 : 157-158. [In Russian.]
- Kanwisher, J. see Wieser, W.
- (Kasimov, A. G.) [Benthos and its importance in fish feeding in Mingechau water-reservoir in the third year of its existence.] Izv. Akad. Nauk Azerbaidj. SSR biol. & agr. 2 1958 : 39-48. [Russian summary.]
- Kasimov, A. G. see Derzhavin, A. N.
- (Katznelson, Z. S.) [On the history of the cellular theory.] Trud. Inst. Estest. Tech. 23 4 : 209-256 figs. [In Russian.]
- Kaye, J. S. Changes in the fine structure of nuclei during spermiogenesis. J. Morph. 103 1958 : 311-321 4 pls.
- Keast, A. Relict animals and plants of the Macdonnell Ranges. Aust. Mus. Mag. 13 : 81-86 10 figs.
- Keast, A. & others. Biogeography and ecology in Australia. Monogr. Biol. 8 : pp. [iv], 640 : 13 pls. text-figs.
- Keilin, D. The Leeuwenhoek Lecture. The problem of anabiosis or latent life: history and current concept. Proc. roy. Soc. 150B 939 : 149-191.
- Keilin, J. The biological significance of uric acid and guanine excretion. Biol. Rev. 34 : 265-296 4 figs.
- (Keller, B. M.) [Problem of the late Cambrian.] Priroda 9 : 30-38 6 figs. [In Russian.]
- Kempthorne, O. An introduction to genetic statistics. New York (John Wiley & Sons, Inc.) & London (Chapman & Hall, Ltd.) 1957. pp. xvii, 545 tables.
- Kerkut, G. A. A neurophysiological analysis of behaviour. Proc. int. Congr. Zool. 15 : 845-848 2 figs.
- Kerr, J. F. Science and societies. Irish Nats'. J. 13 : 2-8.
- Kesteven, G. L. On being a biologist in international service. J. Inst. Biol. 6 : 71-74.
- (Khusainova, N. Z.) [Genesis of the benthos in the Aral Sea.] Sborn. Rabot Ikhtiol. gidrobiol. 2 : 3-33. [In Russian.]
- (Kibyakov, A. V.) [Modern theory on the chemical transfer of an impulse.] Adv. mod. Biol., Moscow 47 : 265-276 4 figs. [In Russian.]
- King, J. E. Variation in abundance of zooplankton and forage organisms in the central Pacific in respect to the equatorial upwelling. Proc. 9th Pacif. sci. Congr. 16 1958 : 98-107 11 figs.
- King, J. E. & Hida, T. S. Zooplankton abundance in the Central Pacific. Part II. Fish Bull. U.S. 57 (118) 1957 : 365-395.
- Kiriakoff, S. G. Aspecten van de moderne Biogeografie, I, III-IV. Natuurw. Tijdschr. 41 1-4 1955 : 21-35, 87-96, 117-123. [Not seen.]
- (Kiselite, T. S.) [Horizontal and vertical distribution of zooplankton in the Kuronian Bay.] Trud. Akad. Nauk Lithuanian S.S.R. ser. B. 1 (13) 1958 : 123-133. [In Lithuanian with Russian summary.]
- Kitaigorodski A. I. New trends in the study of the organic molecules.] Priroda 3 : 21-28 11 figs. [In Russian.]



- Kitasawa, Y.** Bio-economic study of natural populations of animals. *Jap. J. Zool.* **12** (3) : 401-448 6 figs.
- Klapkowski, F. & Kuś, J.** [Prof. Dr. Tadeusz Rogalski as a scientist and organizer.] *Folia Morph. Warszawa* **9** (2) 1958 : 165-169 1 fig.
- Klein, L.** Aspects of river pollution. London, 1957 : i-xii, 1-621.
- Klinger, H. P.** see Wolf-Heidegger, G.
- Klimczyk, M.** Das Zooplankton der Laich- und Vorstreckteiche. *Biul. Zakł. Biol. Staw. Polsk. Akad. Nauk* No. 4 1957 : 75-97 17 figs. [Polish with German summary.]
- Klimczyk, M.** Das Zooplankton in Teichen die streifenweise gemäht wurden. *Biul. Zakł. Biol. Staw. Polsk. Akad. Nauk* No. 6 1958 : 69-79. [Polish with German summary.]
- Klopfer, P. H.** Environmental determinants of faunal diversity. *Amer. Nat.* **93** 873 : 337-342 2 figs.
- Kloss, G. R.** see Travassos, L.
- Knight-Jones, E. W. & Macfadyen, A.** The metachronism of limb and body movements in annelids and arthropods. *Proc. int. Congr. Zool.* **15** : 969-971.
- Knowles, F.** Neurosecretion and animal colour change. *Proc. int. Congr. Zool.* **15** : 486-488.
- Kolaczowski, J.** [Some remarks on the state of Polish anatomical terminology used so far.] *Folia Morph. Warszawa* **9** (2) 1958 : 157-160.
- Kolassovits, H.** see Rosca, D. I.
- Kolesnikov, B. P.** More effort to protect nature in the Urals. *Priroda* **4** : 112. [In Russian.]
- Koller, G.** Johannes Müller als Zoologe. *Verh. dtsh. zool. Ges.* 1958 [1959] : 144-153 5 figs.
- Kolossow, N. G.** Weitere Beobachtungen am Nervensystem des Darmes. *Z. mikr.-anat. Forsch.* **65** : 557-573 12 figs.
- Kon, S. K.** see Fisher, L. R.
- Konikova, A. S.** see Kritzman, M. G.
- Kopac, M. J.** see Zweifach, B. W.
- Koprowski, H.** see Billingham, R. E.
- (Korshnev, P. A.)** [Hemoglobin as a factor in adaptation to hypoxia.] *Adv. mod. Biol., Moscow* **47** (3) 329-346. [In Russian.]
- (Koryakov, E. A.)** (1). [On the problem of the distribution of some pelagic inhabitants of the Baikal and of the northern part of the sea.] *Trav. Baik. Limn. Sta.* **17** : 313-341 4 figs. [In Russian.]
- Koryakov, E. A.** (2). The use of vertical diurnal migrations of aquatic animals for fishing with fixed gear. *Trud. Vses. Ghidrobiol. Obshch.* **9** : 344-350.
- Koshov, M. M.** Über Rhtlinien und Faktoren der Evolution der Fauna des Baikalsees. *Proc. int. Congr. Zool.* **15** : 72-76 1 fig.
- Koshoyants, C. S.** (1). Philosophical works of V. I. Lenin and some problems of biology. *J. gen. Biol. Moscow* **20** : 249-258.
- Koshoyants, C. S.** (2). A comparative-physiological analysis of the periodical activity of certain invertebrates. *Proc. int. Congr. Zool.* **15** : 841-844.
- Koshoyants, C. S.** (3). On the problem of the origin of nervous functions. *J. gen. Biol., Moscow* **20** : 344-350. [English summary.]
- Kosswig, C.** (1). Berthold Klatt. *Mitt. hamburg. zool. Mus.* **56** 1958 : i-v portr.
- Kosswig, C.** (2). Phylogenetische Trends, genetisch betrachtet. *Zool. Anz.* **162** : 208-221.
- Kozhov, M. M.** On the vertical migrations of mass species of plankton in the Lake Baikal. *Trud. Vses. Ghidrobiol. Obshch.* **9** : 161-174 5 figs.
- Kramer, G.** Die funktionelle Beurteilung von Vorgängen relativen Wachstums. *Zool. Anz.* **162** : 243-268.
- Krau, L.** Modificações no Plankton da Enseada de Inhauma, antes e depois da Poluição. *Mem. Inst. Osw. Cruz* **56** : 473-476.
- Krause, H. R.** Biochemische Untersuchungen über den postmortalen Abbau von totem Plankton unter aeroben und anaeroben Bedingungen. *Arch. Hydrobiol. Suppl.* **24** 3-4 : 297-337 7 figs.
- Krebs, E. M.** (1). The problem of radioactive contamination of oceans and marine organisms. *Bull. Acad. Sci. URSS Sér. Biol.* no. 3 : 321-334. [English summary.]
- Krebs, E. M.** (2). Brain metabolism in the evolution of vertebrates. *Proc. int. Congr. Zool.* **15** : 510-512.
- Krebs, E. M. & Verbitskaya, N. A.** Brain metabolism in the evolution of vertebrates. *Bull. Acad. Sci. URSS Sér. Biol.* No. 6 : 855-864. [English summary.]
- (Kritzman, M. G. & Konikova, A. S.)** [Synthesis of protein in organisms as investigated by the method of isotope indicators.] *Adv. mod. Biol. Moscow* **48** 136-154. [In Russian.]
- (Krotkov, F. G.)** [The problems of medicine and biology.] *Priroda* **1** : 108-111. [In Russian.]
- Krussynski, J.** Refractometry of fixed cells and tissues by phase-contrast microscopy. *Folia Morph., Warszawa* **10** (4) : 391-402 1 pl.
- Krutzler, E. M.** Les pharmaciens de Maestricht du 19e Siecle et les sciences naturelles. *Natuurh-Maandbl. Limburg* **48** 11-12 : 138-141 1 fig.
- Kühnelt, W.** Leopold Karl Böhm. *Alman. öst. Akad. Wiss.* **108** : 445-450 portr.
- Kuhnen, H. & Beck, H.** Versuche über myotrope Wirkungen von Arthropoden-Hormonen. *Verh. dtsh. zool. Ges.* 1958 [1959] : 101-108 6 figs.
- Kumar, A.** see Spurway, H.
- (Kumari, E. V.)** [Nature protection in Estonian SSR.] *Priroda* **6** : 51-55 figs. [In Russian.]
- Kuenen, D. J.** Some sources of misunderstanding in the theories of regulation of animal numbers. *Arch. néerl. Zool.* **13** Suppl. 1 1958 [1959] : 335-341.
- Kuhn, H.** Das Netzplankton des Zürichsees im Wechsel der Jahreszeiten. *Mikrokosmos* **48** : 129-133 15 figs.
- Kühnelt, W.** Über die Herkunft der Bodentierwelt des Festlandes. *Proc. int. Congr. Zool.* **15** : 363-366.
- Kupchinov, M. M.** see Yurkevich, I. D.
- Kuroda, T.** see Habe, T.
- (Kursanov, G. A.)** [Philosophical seminarium of biologists.] *Priroda* **10** : 107-108. [In Russian.]
- Kuś, J.** see Klapkowski, F.
- Kusnezov, N.** (1). Sobre la "reversibilidad" en la evolución orgánica. *Dusenja* **7** 1956 : 325-326.

- Kusnezov, N. (2). Die allgemeinen Gesetze der organischen Evolution. *Acta Biotheor.* 13 2-3: 47-86.
- Kuznetsov, A. P. (1). [Distribution of the bottom-fauna in North-Kuril waters.] *Trud. Inst. Okean.* 36: 236-258 11 figs. [In Russian.]
- Kuznetsov, A. P. (2). Distribution of bottom fauna in Kronotski Bay. *Trud. Inst. Okean.* 36: 105-122 10 figs. [In Russian.]
- Lagerspetz, K. Teleological explanations and terms in biology. *Ann. Soc. zool.-bot. fenn. Vanamo* 19 (6): 1-73 3 figs.
- La Greca, M. (1). Considerazioni sull'origine della fauna siciliana. *Boll. Zool.* 24 1957: 593-631 15 figs.
- La Greca, M. (2). Il significato delle variazioni paleoclimatiche nella determinazione del popolamento faunistico attuale di alta montagna. *Ann. Ist. Sci. Lett. "S. Chiara"* No. 8 1958: 217-236 14 figs.
- Landois, R. Presentation artistique et aménagement technique de notre aquarium. *Zoo, Antwerp* 25: 15-25 14 figs.
- Lane-Petter, W. Confinement of laboratory animals. *Proc. int. Congr. Zool.* 15: 98-99.
- Lapage, G. Parasitic animals. Cambridge (Heffer) 1958: pp. xxiii, 355 8 pls. text illust.
- Zasiński, W. [Critical remarks on the "Paris anatomical terminology."] *Folia Morph. Warszawa* 9 (2) 1958: 151-155.
- Lawrence, R. F. The sand-dune fauna of the Namib Desert. *S. Afr. J. Sci.* 55 9: 233-239 3 figs.
- Lawson, J. D. *see* Holland, C. H.
- Lazzari, A. La Grotta Zinzulusa presso Castro, prov. de Lecce. *Ann. Ist. Sci. Lett. "S. Chiara"* No. 8 1958: 237-295 6 pls.
- Leak, L. V. *see* Morrison, J. H.
- Lebedeva, A. A. Arteries of the duodenum in some vertebrates. *Zool. Zh.* 38: 1388-1395 7 figs.
- Le Gros Clark, W. Darwin and the concept of the "missing link." *Proc. int. Congr. Zool.* 15: 424-427.
- Lederberg, J. Genes and antibodies. *Science* 129: 1649-1653.
- Leentvaar, P. Hydrobiologische waarnemingen in de Leersumse plassen. *Levende Nat.* 62: 52-58 3 figs.
- Leiner, M. Seltsame Bildungen im Tierreich. *Natur. u. Volk* 89: 146-157 12 figs.
- Lejeune-Ledant, G. *see* Albert, F.
- Lekagul, B. Proposed game reserves and national parks in Thailand. *Proc. 9th Pacif. sci. Congr.* 7: 47-49.
- Lellak, J. Die Bodenfauna zweier Teichen und ihre temporäre Periodizität. *Mém. Soc. zool. tchécosl.* 22 (3) 1958: 203-231.
- Leonardi, P. (1). Finalistic evolution or "teleogenesis." *Proc. int. Congr. Zool.* 15: 974-975.
- Leonardi, P. (2). Una lettera inedita di Carlo Darwin. *Ann. Univ. Ferrara N.S. Sez. IX* 3 4: 71-74 2 figs.
- Lerner, I. M. (1). Genetic basis of selection. *N.Y. i-xvi* 1958: 1-298 figs.
- Lerner, I. M. (2). Marxist biology viewed dimly. *Amer. Nat.* 93 873: 343-346.
- Leslie, P. H. The properties of a certain lag type of population growth and the influence of an external random factor on a number of such populations. *Physiol. Zool.* 32: 151-159.
- Leuchtenberger, C. Cytochemistry of nucleic acids. *Proc. int. Congr. Zool.* 15: 727-728.
- Levi, C. Principaux aspects zoologiques des côtes du Finistère. *Penn ar Bed N.S.* 2 6 1955: 1-3.
- Levine, N. D. Uniform endings for the names of higher taxa. *Syst. Zool.* 7 (3) 1958: 134-135.
- Levinson, L. B. Functional histochemical investigations of nerve cells. *Proc. int. Congr. Zool.* 15: 710-712.
- Liakhovich, V. P. *see* Vinberg, G. G.
- Light, S. F. & others. Intertidal invertebrates of the central California coast. Berkeley (University of California Press) 1954 pp. xiv, 446, 138 figs.
- Likhodeeva, N. F. *see* Derzhavin, A. N.
- (Lindberg, G. U.) [Alexander M. Djakonov.] Issled. dalnevost. *Mor. SSSR* 5 1958: 381-385 port. [In Russian.]
- Lindberg et Al. A list of fauna of the sea waters of the South Sakhalin and South Kuril Islands. Issled. Dalnevost. *Mor. SSSR* 6 2: 173-253. [In Russian.]
- Linsley, E. G. & Uisinger, R. L. Linnaeus and the development of the International Code of Zoological Nomenclature. *Syst. Zool.* 8: 39-47.
- (Liozner, L. D. & Dobrokhotov, V. N.) [The results of the conference on the problems of physiological regeneration.] *Adv. mod. Biol. Moscow* 48: 239-244. [In Russian.]
- Lippert, H. Zur Methodik der Muskelquerschnittsmessung. *Anat. Anz.* 106: 299-303.
- Lowarch, W. *see* Baker, J. R.
- Lloyd, M. Population fitness and population density. *Proc. int. Congr. Zool.* 15: 796-797.
- Lobachov, M. E. Méthode physiologique appliquée à l'étude de l'ontogenèse. *Trud. Leningr. Soc. Nat.* 70: 1 17-18. [In Russian.]
- Loewenberg, B. J. The mosaic of Darwinian thought. *Vict. Stud. Indianapolis* 3 1: 3-18.
- (Logvinenko, B. M.) [New settlers in the Caspian sea.] *Priroda* 2: 100-101. [In Russian.]
- Longhurst, A. R. (1). The sampling problem in benthic ecology. *Proc. N.Z. ecol. Soc.* No. 6 1958: 8-12 2 figs.
- Longhurst, A. R. (2). Benthos densities off Tropical West Africa. *J. Cons. Int. Explor. Mer* 25: 21-28.
- Loobny-Herzyk, E. A. Distribution of zooplankton in the Kronotski Bay. *Trud. Inst. Okean.* 36: 92-100 6 figs. [In Russian.]
- Lopashov, G. V. Comparative studies of the transformation capacity of the eye layers at various stages of development in vertebrates. *Proc. int. Congr. Zool.* 15: 613-615.
- López, E. A. (1). Especificación, subespecificación y biogeografía. Madrid, 1957: 1-137.
- López, E. A. (2). Especie y especie biológica en Aristóteles. *An. Asoc. esp. Progr. Cienc.* 24 4: 1021-1033.
- Lorenz, K. (1). Plays and vacuum activities. *Instinct, Paris* 1956: 633-645.
- Lorenz, K. (2). The objectivistic theory of instinct. *Instinct, Paris* 1956: 61-76.

- Lorenz, K. (3).** Nachruf auf Oskar Heinroth. *Zool. Gärt. Lpz.* **24** 1958 [1959]: 264-274 2 figs.
- [**Lototski, B. V.**] [The main lines of the scientific work of academician Eugene Nikanorovich Pavlovski.] *Trud. Inst. Zool. Parazit. Stalinabad* **21** 1954: 23-29. [In Russian.]
- Lowe, C. H., jr.** Specific and infraspecific variation. *J. Ariz. Acad. Sci.* **1** 1: 31-34.
- Lubet, P.** Aperçu sommaire sur la macrofaune benthique des chenaux du Bassin d'Arachon. *P.V. Soc. linn. Bordeaux* **96** [1956]: 147-155.
- Lubyantsev, I. P.** Benthic fauna of bottomland water reservoirs of the middle part of the Dnepr in the region to be flooded with the waters of the Dneprodzerzhinsk Reservoir. *Zool. Zh.* **38**: 1612-1619.
- Lubyantsev, I. P.** see Melnicow, G. B.
- Ludwig, W.** Der "Trend" vom Standpunkt der Populationsgenetik. *Zool. Anz.* **162**: 221-243.
- Lugovoi, A. E. & Gorbunova, M. A.** [Nature preservation in the lower Volga and in the Northern Pricaspian.] *Priroda* **8** 111-112. [In Russian.]
- Lurie, E.** Louis Agassiz and the idea of evolution. *Vict. Stud. Indianapolis* **3** 1: 87-108.
- Lüscher, M.** 'Pheromones': A new term for a class of biologically active substances. *Nature, Lond.* **183**: 55-56.
- Lynch, W. F.** Factors influencing metamorphosis of larvae of some of the sessile organisms. *Proc. int. Congr. Zool.* **15**: 239-241.
- Ma, T. Y. H.** The relation of growth rate of reef corals to surface sea water temperature as a basis for the study of causes of diastrophisms initiating evolution. *Proc. int. Congr. Zool.* **15**: 986-987.
- Macan, T. T.** - A guide to freshwater invertebrate animals. London (Longmans) pp. x, 118, 202 figs.
- Macarovic, N. & Motas, C. I.** Jubileu Muzeului de Istorie Naturala din Iasi. *Natura, Bucuresti* **11** 5: 110-116 3 figs. [In Rumanian, Russian summary.]
- MacArthur, R. H.** A note on stationary age distributions in single-species populations and stationary species populations in a community. *Ecology* **39** 1958: 146-147.
- MacArthur, R. H.** see Hutchinson, G. E.
- Macdonald, R. & McMillan, N.** James Dowsett Rose Cleland (Cleland)—a forgotten Irish naturalist. *Irish Nat.* **13** 3: 70-72.
- McDowell, R. E.** Physiological approaches to animal climatology. *J. Hered.* **49** 2 1958: 52-61 1 fig. [Not seen.]
- Macfadyen, A.** see Knight-Jones, E. W.
- McKinley, G. M.** Evolution: The ages and tomorrow. *N.Y.*, 1957: i-ix, 1-275.
- McMillan, N.** see Macdonald, R.
- Maeyens, J.** Zoos et menageries dans l'antiquité. *Zoo, Antwerp* **25**: 12-14 3 figs.
- Maguire, B., Jr.** Passive overland transport of small aquatic organisms. *Ecology* **40**: 312.
- Mallet, P.** Aperçu sur la faune Bretonne. *Penn ar Bed* No. 16: 1-5 1 fig.
- [**Makhotin, A. A.**] [On the principles in the composition of phylogenetic patterns.] *Trud. Inst. Morf. Zhiv.* **27**: 52-67 5 fig. [In Russian.]
- Malhotra, S. K.** What is the 'Golgi Apparatus' in its classical site within the neurones of vertebrates? *Quart. J. micr. Sci.* **100**: 339-367 13 figs.
- [**Malkin, V. B.**] Biological problem of space travel. *Priroda* **10**: 35-44 3 figs. [In Russian.]
- Maneely, R. B.** Epididymal structure and function: a historical and critical review. *Acta zool., Stockholm* **40** (1): 1-21.
- Manteifel, B. P.** The adaptive value of the periodic migrations of aquatic organisms. *Ichthyol. Problems* No. 13: 3-15.
- Manton, S. M.** Functional morphology and the evolution of diagnostic characters of Arthropodan groups. *Proc. int. Congr. Zool.* **15**: 390-393.
- Marcuzzi, G.** Nuovi orientamenti in biogeografia. *Monit. Zool. Ital.* **66** 1958 [1959]: 251-258.
- Margalef, R.** Mode of evolution of species in relation to their places in ecological succession. *Proc. int. Congr. Zool.* **15**: 787-789.
- Mariani, H.** Alcuni elementi per lo studio della zoogeografia della Sicilia. *Boll. Zool.* **24** 1957: 685-698.
- Markert, C. L., Jr.** Multiple forms of enzymes: tissue, ontogenetic, and species specific patterns. *Proc. nat. Acad. Sci. Wash.* **45**: 753-763 3 fig.
- Markevich, A. P.** Phylogenetic investigations of D. M. Fedotov. *Trud. Inst. Morf. Zhiv.* **27**: 13-25.
- Markle, M. S.** A history of the Joseph Moore Museum at Earlham College. I. Early history. *Proc. Ind. Acad. Sci.* **68**: 311-312.
- [**Markosyan, A. A.**] [New factors in coagulation of blood.] *Adv. mod. Biol. Moscow* **48**: 186-206. [In Russian.]
- Markowski, S.** The cooling water of power stations; A new factor in the environment of marine and freshwater invertebrates. *J. anim. Ecol.* **28**: 243-258 2 figs.
- Marsh, E. P.** see Hodgkin, E. P.
- Martoja-Pierson, M.** see Martoja, R.
- Martoja, R. & Martoja-Pierson, M.** Sur quelques caractères histochemiques du nucléole de l'oocyte au cours de l'interphase de grand accroissement. *Bull. biol.* **73**: 335-354 1 pl. 3 figs.
- Mather, K.** Continuous variation in natural populations. *Proc. int. Congr. Zool.* **15**: 171-173.
- Mathur, G.** Economics of the living organisms. *Sci. & Cult.* **24** 8: 349-353.
- Matoušková, B.** The beginnings of Darwinism in Bohemia. *Folia Biol. Praha* **5**: 169-185 2 pls.
- Matsakis, J.** see Vaudel, A.
- Mathews, L. H.** Man and the World's fauna. *Adv. Sci.* **16** 62: 43-54.
- Matveiev, B. S.** Darwin and the historical method in embryology. *Proc. int. Congr. Zool.* **15**: 992-995.
- Matveyev, B. S.** Problem of hetero-chromis, I.E. Asynchrony in the process of development, in the light of Ch. Darwin's teaching. *J. gen. Biol., Moscow* **20**: 359-369.
- Mayr, E.** Isolation as an evolutionary factor. *Proc. Amer. phil. Soc.* **103**: 221-230.
- Mazokhin-Porshnyakov, G. A.** The vision of the arthropods and polarised light. *Zool. Zh.* **38**: 1032-1041 3 figs. [In Russian with English summary.]

- Mogyeri, J.** *see* Ábrahám, A.
- Meitner, E. R.** Über die funktionelle Kausalität der Clavicula. *Anat. Anz.* 107: 225-229.
- Meixner, A.** Professor Dr. Karl Alfons Penecke zur 100. Wiederkehr seines Geburtstages. *Carinthia* II 68 1958: 63-90 1 pl.
- Melnicow, G. B. & Lubyonow, I. P.** The forecasting of biological regime of Dneprodzerzhinsk Reservoir. *Ichthyol. Problems* No. 13: 90-107.
- Melville, R. V.** Proposed rejection for Nomenclatorial purposes of Bertrand, (E), 1763 "Dictionnaire universel des fossiles propres et fossiles accidentales." *Bull. zool. Nom.* 17 (1-2): 49-53.
- Menzies, R. J. & Imbrie, J.** On the antiquity of the deep sea bottom fauna. *Oikos* 9 1958: 192-210 2 figs.
- Mertens, R.** Otto zur Strassen. *Natur u. Volk* 89: 157-161 figs.
- Meyer-Abich, A. (1).** Vom zweifachen historischen Ursprung aller Morphologie. *Arch. néerl. Zool.* 13 Suppl. I 1958 [1959]: 10-27.
- Meyer-Abich, A. (2).** Alexander von Humboldt and the science of the nineteenth century. *Univ. Tex. Publ.* No 5914: 241-259.
- Michajlow, W.** Evolutional problems of parasitology. *Wiad. Parazyt. Warszawa* 5: 407-443. [English summary].
- Miehle, H.** *see* Kaiser, E.
- Miller, R. S.** *see* Raymont, J. E. G.
- Minganti, A.** Sulla costituzione chimica degli involucri ovariali negli animali. *Boll. Zool.* 25 1958 [1959]: 55-88.
- Mirigliano, G.** La costituzione geologica della Sicilia. *Boll. Zool.* 24 1957: 571-591.
- Mirimanyan, H. P.** [The law on nature conservancy in action.] *Priroda* 3: 62-64. [In Russian.]
- (Mironov, N. V. & Gerasimov, V. V.)** [Marine aquarium.] *Priroda* 2: 114-115 3 figs. [In Russian.]
- Miyadi, D.** *see* Habe, T.
- Molodkina, L. N.** New development in the study of nervous activity. *Priroda* 4: 97-99 fig. [In Russian.]
- (Monakov, A. V.)** [Zooplankton of the Volga mouth at Rybinsk water-reservoir in the period 1947-1954.] *Biol. Sta. Borok* 3 1958: 214-225 10 figs. [In Russian.]
- Moog, F.** Enzymes: formation and growth. *In* Rudnick, D.: *Embryonic nutrition* (Chicago University Press) 1958: 87-102.
- Moran, P. A. P. & Watterson, G. A.** The genetic effects of family structure in natural populations. *Aust. J. biol. Sci.* 12 1: 1-16.
- (Mordukhai-Boltovskoi, F. D.)** (1) [On the problem of productivity of the Rybinsk water-reservoir.] *Biol. Sta. Borok* 3 1958: 7-19. [In Russian.]
- Mordukhai-Boltovskoi, F. D. (2)** Some data on the rate of species formation in marine fauna. *Bull. Soc. Nat. Moscou Sér. Biol.* 64: 141-143. [English summary.]
- (Mordukhai-Boltovskoi, F. D., Mordukhai-Boltovskaya, E. D. & Yanovskaya, G. Y.)** [Fauna of the littoral zone in Rybinsk water-reservoir.] *Biol. Sta. Borok* 3 1958: 142-194 21 figs. [In Russian.]
- Mordukhai-Boltovskaya, E. D.** *see* Mordukhai-Boltovskoi, F. D.
- Moreno, I. & Alvarado, R.** Cuestiones de Nomenclatura Zoológica. *Bol. Soc. esp. Hist. nat. Secc. Biol.* 56 2 1958: 129-132.
- Morgans, J. F. C.** The benthic ecology of False Bay. Part 1: The biology of infratidal rocks, observed by diving, related to that of intertidal rocks. *Trans. roy. Soc. S. Afr.* 35 5: 387-442 4 pls. 11 figs.
- Morrill, T. A.** The 'field' concept of organic evolution. *J. zool. Soc. India* 10 1958 [1959]: 92-99.
- Morris, D.** The function and causation of courtship ceremonies. *Instinct, Paris* 1956: 261-286 16 figs.
- Morrison, J. H., Leak, L. V. & Wilson, G. B.** Combined staining of nucleolus and chromosomes in squash preparations of plant and animal somatic tissues. *Trans. Amer. micr. Soc.* 78: 358-362 4 figs.
- Mosimann, J. E.** The evolutionary significance of rare matings in animal populations. *Evolution* 12 1958: 246-261 6 figs.
- Motas, C. I.** *see* Macarovici, N.
- Mroczkowski, M.** Remarks on zoological nomenclature. *Przegl. zool.* 1 (1) 1957: 48-52. [In Polish.]
- Muller, H. J.** The uniqueness of the matabile material. *Proc. X internat. Congr. Genetics* 1: 306-317.
- Müntzing, A. (1).** Darwin's views on the origin and variation of domestic animals and cultivated plants. *Svensk. Naturvetenskap* 12: 143-173 7 figs.
- Müntzing, A. (2).** Darwin's views on variation under domestication in the light of present-day knowledge. *Proc. Amer. phil. Soc.* 103: 190-220.
- Murata, H.** Comparative studies of the spleen in submammalian vertebrates. I. Topographical anatomy and relative weight of the spleen. *Okajimas Folia anat. jap.* 33 (1): 1-9.
- Murphy, R. C.** Robert Ferguson, forgotten naturalist. *Proc. Amer. phil. Soc.* 103: 774-777.
- Murray, P. D. F.** The voyage of the Beagle. *New Biol. No.* 28: 7-24.
- Murray, R. W.** Generator potentials and the initiation of sensory nerve impulses. *Proc. int. Congr. Zool.* 15: 875-878.
- Mushkeliashvili, N. I.** Prospects for the development of Science in Georgia. *Priroda* 5: 45-49. [In Russian.]
- Nath, V.** The so-called Golgi bodies in oogenesis. *Proc. int. Congr. Zool.* 15: 721-722.
- Nauck, E. Th.** Zur Chronologie und Topographie der Lehnatomien in Mitteleuropa bis zum Jahre 1700. *Anat. Anz.* 106: 409-429.
- (Naumov, D. V.) (1).** [Coral reefs of the Island Khainan.] *Priroda* 9: 83-90 8 figs. 2 pls. [In Russian.]
- Naumov, N. P. (2).** Population dynamics in terrestrial vertebrates. *Proc. int. Congr. Zool.* 15: 1004-1006.
- Nauwerk, A.** Zur Bestimmung der Filtrierate limnischer Planktontiere. *Arch. Hydrobiol. Suppl.* 25 1: 83-101 1 fig.
- Needham, A. E.** The origination of life. *Quart. Rev. Biol.* 34 3: 189-209.
- Negrea, St.** *see* Botosăneanu, L.
- Nelson, G. E., Jr.** The limnology of a small artificial impoundment in Alabama. *J. Ala. Acad. Sci.* 30 2 1958: 39-50 7 figs.
- Newell, N. D.** The nature of the fossil record. *Proc. Amer. phil. Soc.* 103: 264-285 22 figs.

- Newell, N. D., Imbrie, J., Purdy, E. G. & Thurber, D. C. Organism communities and bottom facies. Great Bahama Bank. Bull. Amer. Mus. nat. Hist. 117 4: 177-228 12 pls. 17 figs.
- Nicholson, E. M. Introductory remarks (to symposium on 'Conservation of nature'). Proc. int. Congr. Zool. 15: 53-56.
- Nicolaï-Guillaumet, P. Recherches faunistiques et écologiques sur la rivière "La Massane." Vie et Milieu 10: 217-266 11 figs.
- Nielsen, C. O. Soil fauna and the moisture regime of its environment. Proc. int. Congr. Zool. 15: 349-351.
- Nigon, V. & Fourche, J. La précision des mesures microrespiro-métriques réalisées à l'aide du ludion. Bull. biol. 92: 36-54 8 figs.
- Noble, E. R. The ecology of parasitism. Proc. int. Congr. Zool. 15: 654-657.
- Notte, D. J. The genetic basis of evolution. Pamphl. S. Afr. biol. Soc. No. 20 1958: 27-29.
- Novikoff, A. B. Lysosomes and the physiology and pathology of cells. Biol. Bull. Woods Hole 117 (2): 385.
- (Novikov, G. A. (1). [Importance of the animal world of the Cola peninsula to man.] Zhivot. Mir 5 1958: 572-575. [In Russian.]
- Novikov, G. A. (2). Ernst Haeckel and animal ecology. Vestn. Leningr. Univ. No. 3 Sér. Biol. No. 1: 57-71. [English summary.]
- Odom, E. P. Homeostasis of the ecosystem in relation to animal populations. Proc. int. Congr. Zool. 15: 783-784.
- Oliveira, L. P. H. de (1). Poluição das águas marítimas. Estragos na flora e fauna do Rio de Janeiro. Mem. Inst. O. Cruz 56 1958: 39-77 9 pls.
- Oliveira, L. P. H. de (2). Limnologische Notizen über die Rio-de Janeiro-Lagunen. Arch. Hydrobiol. 55: 238-263 1 map.
- Olson, E. C. & Miller, R. L. Morphological Integration, pp. xv, 317, 77 figs., Chicago, 1958.
- Oparin, A. I. Origin and development of life on earth. Sci. & Cult. 25 1: 23-29.
- Oppenheim, J. Intercellular activities in vertebrate development. Science 130: 686-692 7 figs.
- Oren, O. H. & Steinitz, H. Regional bibliography of the Mediterranean coast of Israel and the adjacent Levant countries. Bull. Sea Fish. Res. Sta. Israel No. 22: 1-32.
- Orghidan, T. Ein neuer Lebensraum des unterirdischen Wassers: Der hyporheische Biotop. Arch. Hydrobiol. 55: 392-414 4 figs.
- Orska, J. On recent studies concerning the material basis of heredity. Przegl. zool. 3: 10-19 4 figs. [In Polish.]
- Osanai, H. The effects of growth hormone and cephalin on the growth of fibroblasts in vitro. Annot. Zool. jap. 32 (1): 6-12.
- Osborne, P. J. see Hamman, C. S.
- Osipov, S. K. The role of suspended deposits in the processes of the formation of benthic fauna in the desert water reservoirs. Zool. Zh. 38: 1303-1309 3 figs.
- Ostrowski, K. Practical remarks concerning the quantitative autoradiography. Folia Morph. Warszawa 10: 275-281.
- Oyama, S. see Tomiyama, T.
- (Ozhogova, V. E.) [Benthos of the Farkhad water-reservoir.] Trud. Inst. Zool. Parazit. Stalinabad 21 1954: 91-109. [In Russian.]
- Paclet, J. (1). Farbenbestimmung in der Biologie. Jena, 1958: 1-vii, 1-76 illust.
- Paclet, J. (2). Lamarckismus a dnešní stav vývoje vědy. Biologie, Bratislava 14: 321-324 2 figs.
- Palmgren, A. Societas pro Fauna et Flora Fennica 1 nov. 1921-1 nov. 1946. Acta Soc. Fauna Flora fenn. 75 1958: 1-91.
- [Pankratova, V. Y.] Benthos of the ponds for rearing *Vimba vimba*, *Chalcalburnus chalcoides* and its changes caused by improved conditions. Trav. Inst. zool. Acad. Sci. URSS 26: 296-346 15 figs. [In Russian.]
- Panning, A. Beiträge zur Geschichte des Zoologischen Staatsinstituts und Zoologischen Museums in Hamburg (4. Teil). Mitt. hamburg. zool. Mus. 56 1958: 1-30 3 pls.
- Pantin, C. F. A. (1). Alfred Russell Wallace, F.R.S., and his essays of 1858 and 1855. Notes & Rec. roy. Soc. Lond. 14 1: 67-84.
- Pantin, C. F. A. (2). President's address at the unveiling of the Darwin-Wallace memorial plaque. Proc. linn. Soc. Lond. 170: 219-226 1 pl.
- Pardi, L. L'orientamento astronomico degli animali: risultati e problemi attuali. Boll. Zool. 24 1957: 473-523 20 figs.
- Parenzan, P. (1). Conseguenze biocenotiche dei relitti sottomarini. Banchi sperimentali e peisicosi artificiali. Boll. Soc. Nat. Napoli 66 1958: 91-96.
- Parenzan, P. (2). I fondi a Caulerpa del Mediterraneo (Tonio e Tirreno). Thalassia Ionica 2: 3-14.
- Parr, A. E. The habitat group. Curator 2 2: 107-128 23 figs.
- Parry, D. A. The company of biologists and its journals. Proc. int. Congr. Zool. 15: 50-51.
- Passmore, J. Darwin's impact on British metaphysics. Vict. Stud. Indianapolis 3 1: 41-54.
- Pasternak, F. A. see Gussev, A. V.
- Pasquini, P. On the teaching of Zoology in Italian universities. Proc. int. Congr. Zool. 15: 83-86.
- Paucă, M. Evolution of the flora and fauna during the Quaternary (Anthropogeny). Natura, București 11 3: 10-20 3 figs. [English summary.]
- Pauli, V. L. [Rhythm in the biological processes in the ocean.] Trav. Sta. biol. Sebastopol 11: 353-358. [In Russian.]
- Paulsen, E. see Boyden, A.
- Pavan, C. Morphological and physiological aspects of chromosomal activities. Proc. 10th internat. Congr. Genetics 1: 321-336 7 figs.
- (Pavlovsky, E. N.) (1). [Zoological Congress of Darwin and Wallace.] Vestn. Akad. Nauk SSSR 1: 94-97. [In Russian.]
- (Pavlovsky, E. N.) (2). [For the planned solution of biological problems.] Priroda 1: 38-40. [In Russian.]
- Pavlovsky, E. N. (3). On the processes of organism adaptation to new environmental conditions in free and parasitic life. J. gen. Biol. Moscow 20: 329-343.
- Pavlovsky, E. N. (4). P. F. Gorjaninov, K. M. Baer and N. A. Kholodovsky as evolutionists. Bull. Acad. Sci. URSS Sér. Biol. No. 6: 801-813.



- Pavlovsky, E. N. (5).** Some modes of evolution of infectious and parasitic diseases with natural foci. *Proc. int. Congr. Zool.* 15 : 30-35.
- Payne, H. C.** Our National Parks. *Afr. Wild Life* 13 (3) : 181-188 7 figs.
- (Pechylens, O. T.) (1).** [On the zooplankton of the Trak lakes.] *Trud. Akad. Nauk Lithuanian SSR ser. B* 1 (13) 1958 : 135-152 3 figs. [In Russian.]
- (Pechylens, O. T.) (2).** [Zooplankton of the lake Galve.] *Biolog. Inst. Darbai* 3 1958 : 73-90. [In Lithuanian with Russian summary.]
- Peckham, M. (1).** Darwinism and Darwinisticism. *Vict. Stud. Indianapolis* 3 1 : 19-40.
- Peckham, M., Editor (2).** The Origin of Species by Charles Darwin. A variorum text. Philadelphia : 1-816.
- Peredelskii, A. A.** [A study of the rôle of soil invertebrates on the fate of soil polluted by radioactive isotopes.] *In* Aleinikova, M. M. & others. All-Union conference on soil zoology. Summary of papers. Moscow 1958 : 74-75.
- Péres, J.-M. (1).** Deux plongées au large du Japon avec le bathyscaphe français F.N.R.S. III. *Bull. Inst. océanogr. Monaco* No. 1134 : 1-28 4 pls.
- Péres, J.-M. (2).** Plongées biologiques en Bathyscaphe. *Proc. int. Congr. Zool.* 15 : 213-215.
- Péres, J.-M. & Picard, J.** Manuel de bionomie benthiques de la Mer Méditerranée. *Rec. Trav. Sta. mar. Endoume* No. 23 1958 : 5-122 8 figs.
- Perutz, M. F.** The molecular basis of life. *Research* 12 : 326-334 10 figs.
- Petrov, R. V.** *see* Zhukov-Verezhnikov, N. N.
- Pétursson, S.** Kenning Darwin's 100 ára. *Náttúrufræðingurinn* 29 3 : 153-168 4 figs.
- Phillips, E. P.** Biological Society 1919-1944. Pamphl. S. Afr. biol. Soc. No. 20 1958 : 43-44.
- Phillips, R. W.** The effects of climate on animals and their performance. *J. Hered.* 49 2 1958 : 46-51 5 figs. [Not seen.]
- Philpott, D. E.** A calculator to aid in the correction of astigmatism in electron microscopes. *Biol. Bull. Woods Hole* 117 (2) : 423.
- Pickard, J. G.** A survey of certain micro-organisms in the polluted water of a gasworks outflow. *Rep. Bishop's Stortford Coll. nat. Hist. Soc. No. 7* 1957 : 23-26.
- Pidgaiko, M. L.** On the formation of the fauna of new ponds. *Rep. Acad. Sci. Ukr. No. 2* : 203-207. [English summary.]
- Pierce, M. E.** *see* Conover, J. T.
- Piéron, H.** L'évolution du comportement dans ses rapports avec l'instinct. *Instinct*, Paris 1956 : 677-704.
- Pimentel, R. A.** Taxonomic methods, their bearing on subspeciation. *Syst. Zool.* 7 1958 : 139-156 3 figs.
- Pirie, N. W.** Some aspects of the origins of life considered in the light of the Moscow International Symposium. *ICSU Rev.* 1 1 : 40-49.
- (Platova, T. P.)** [Method of extraction of the cellular nuclei and the study of their synthesis of protein.] *Adv. Mod. Biol., Moscow* 47 : 168-184 7 figs. [In Russian.]
- (Poddubnaya, T. L.)** [Composition of benthos of the Rybinsk water-reservoir in 1953-1955.] *Biol. Sta. Borok* 3 1958 : 195-213 8 figs. [In Russian.]
- (Pokrovski, V. S.)** [All-Soviet Commission on Nature preservation.] *Priroda* 3 : 113.
- Polansky, V. I.** On the integrity of species and its evolution. *Bull. Soc. Nat. Moscou Sér. Biol.* 64 4 : 5-13.
- Polyakov, I. M.** Lamarck's teaching on gradation in the animal kingdom (in commemoration of 150th anniversary of the "Philosophie Zoologique"). *Zool. Zh* 38 : 1471-1480.
- (Pomerantseva, M. D.)** [Influence of narcosis on radioactive reaction in animals.] *Trud. Inst. Gen.* 24 1958 : 409-425. [In Russian.]
- (Ponomareva, L. A.)** Some data on the zooplankton of the western coast of Southern Sakhalin. *Issled. Dalnevost. Mor. SSSR* 6 2 : 47-772 figs. [In Russian.]
- (Ponomareva, L. A. & Weitov, V. I.)** On the Hermit Atoll. *Priroda* 4 : 71-72 2 figs. [In Russian.]
- Popescu, E.** Recherches sur les méthodes de détermination quantitative du plancton. *Bul. Inst. Cercet. Pisc. Roman.* 18 (1) : 66-74.
- Pora, E. A.** Recherches sur l'équilibre ionique chez les animaux: l'homéostasie. *Proc. int. Congr. Zool.* 15 : 1061-1063.
- Pöravinson, S.** Alexander von Humboldt. Hundradda året 6. mai 1959. *Náttúrufræðingurinn* 29 2 : 65-80 2 figs.
- Pósalaky, Z.** *see* Törő, I.
- Postma, N.** The aggregate of motile and postural function in the animal kingdom and its differentiation. *Proc. int. Congr. Zool.* 15 : 523-525.
- Poynter.** Centenary of the Darwin-Wallace paper on natural selection. *Sci. & Cult.* 25 2 : 125-129 4 figs.
- (Pressman, Y. M.)** [Symposium on the studies of peripheral and central mechanisms in the motion of animals.] *Vestn. Akad. Nauk SSSR* 3 : 107-108. [In Russian.]
- Przelecka, A.** A study of Rawitz's 'inversion staining.' *Quart. J. micr. Sci.* 100 : 231-239.
- Pumphrey, R. J.** The forgotten man: Sir John Lubbock. *Science* 129 : 1087-1092 2 figs.
- Purchon, R. D.** Darwin, Wallace and Linnaeus celebrations in Singapore. *Nature, Lond.* 183 : 723-725.
- Purdy, E. G.** *see* Newell, N. D.
- Radu, V.** *see* Ionescu, M.
- Rainey, R. C.** Some new methods for the study of flight and migration. *Proc. int. Congr. Zool.* 15 : 866-870 1 fig.
- Raison, T. T.** The future of London's Zoo. *New Scientist* 5 : 644-646 2 figs.
- (Ramenskaya, G. P.)** [Proteolytic ferments of the leucocytary serums and leucocytes.] *Trud. Inst. Morf. Zhiv.* 26 : 126-143 2 figs. [In Russian.]
- Rand, A. L.** Conservation notes on New Guinea and South-eastern Asia. *Proc. 9th Pacif. sci. Congr.* 7 : 22-23.
- Raven, C. P.** Information versus preformation in embryonic development. *Arch. néerl. Zool.* 13 Suppl. 1 1958 [1959] : 185-193.
- Raymont, J. E. G. & Miller, R. S.** Changes in the zooplankton with fertilization in an isolated body of seawater. *Proc. int. Congr. Zool.* 15 : 257-259.
- (Razumov, S. A.)** [Problems of ecological physiology.] *Vestn. Akad. Nauk SSSR* 4 : 121-123. [In Russian.]

- Reavell, P. E.** Aquatic life of the River Dern. A Survey of Dernford Fen, Sawston, Cambridgeshire 1950-58 1958 : 25-29.
- Redier, L.** Louis Semichon (1879-1959). Cahiers Nat. N.S. 15 4 : 97-100.
- Régnier, R. (1).** La station de zoologie agricole du nord-ouest, ses origines et son oeuvre. Rev. Soc. Sav. Haute Norm. No. 9 1958 : 3-24 2 pls.
- Régnier, R. (2).** Les nouveaux aménagements du Muséum de Rouen. La Salle de Normandie. Rev. Soc. Sav. Haute Norm. No. 13 : 29-33 4 pls.
- Reig, O. A.** Acerca de la ubicación de los estudios paleontológicos. Holmbergia 6 15 : 19-45. [English summary.]
- Reish, D. J. (1).** An analysis of a sample of systematic literature, 1758-1954. Syst. Zool. 7 1958 : 174-179.
- Reish, D. J. (2).** An ecological study of pollution in Los Angeles—Long Beach Harbour, California. Occas. Pap. Allan Hancock Fdn. No. 22 : 1-119 18 pls.
- Reish, D. J. (3).** A discussion on the importance of the screen size in washing quantitative marine bottom samples. Ecology 40 : 307-309.
- Remane, A.** Die Interstitielle Fauna des Meeressandes. Proc. int. Congr. Zool. 15 : 320-323.
- Remington, C. L.** The application of interspecific hybridization to defining animal species. Proc. int. Congr. Zool. 15 : 119-120.
- Renaud-Debyser, J.** Contribution à l'étude de la faune interstitielle du Bassin d'Arcachon. Proc. int. Congr. Zool. 15 : 323-326.
- Rensch, B.** Die Wirkung ästhetischer Faktoren bei Wirbeltieren. Proc. int. Congr. Zool. 15 : 851-854.
- Revelle, R.** International co-operation in the marine sciences. ICSU Rev. 1 1 : 27-39.
- Reyer, R.** Finalité et Instinct. Instinct, Paris 1956 : 747-783.
- Richards, A. F. & Brattstrom, B. H.** Bibliography, cartography, discovery, and exploration of the islas Revillagigedo. Proc. Calif. Acad. Sci. (4) 29 9 : 315-360 4 figs.
- Ride, W. D. L.** A museum expedition to the Hamersley range. Aust. Mus. Mag. 13 3 : 94-98 3 figs.
- Riley, G. A.** Oceanography of Long Island Sound. Bull. Bingham oceanogr. Coll. 17 1 : 9-30 8 figs. [With Russian summary.]
- Ringuet, R. A.** Ambientes acuáticos continentales. Ensayo bioecológico con particular aplicación a la República Argentina. Holmbergia 5 12-13 1956 : 155-207.
- Rixon, A. E.** see Toombs, H. A.
- (Rishkov, V. L.)** [Investigations of tissue cultures.] Priroda 3 : 35-43 4 figs. [In Russian.]
- Robinson, J. T.** Charles Darwin and the background to Darwinism. Pamph. S. Afr. biol. Soc. No. 20 1958 : 20-23.
- Rochlin, S. A.** Charles Darwin and the Cape. S. Afr. J. Sci. 55 12 : 311-317.
- (Rodendorf, B. B.)** [Phylogenetic reliefs.] Trud. Inst. Morf. Zhiv. 27 : 41-51. [In Russian.]
- Roë, A. & Simpson, G. G.** Behaviour and Evolution. New Haven, 1958 pp. i-viii, 1-557 19 figs.
- Robdendorf, B. B.** The main features of phylogenetic reliefs. Proc. int. Congr. Zool. 15 : 1024-1025.
- Röhrs, H.** Neue Ergebnisse und Probleme der Allogamietforschung. Z. wiss. Zool. 162 (1-2) : 1-895 55 figs.
- Rokitsky, P. F.** A study of the process of artificial selection under conditions of natural and experimentally induced by X-ray radiation variability. Bull. Soc. Nat. Moscou Sér. Biol. 64 4 : 75-97 29 figs. [English summary.]
- Rollins, R. C.** Linnaeus: Codes and nomenclature in Biology. Syst. Zool. 8 : 2-3.
- Romanini, M. G. M.** see Vialli, M.
- Romer, A. S. (1).** Tetrapod limbs and early tetrapod life. Evolution 12 1958 : 365-369.
- Romer, A. S. (2).** The vertebrate story. Chicago (Chicago University Press) 4th edition pp. vii, 437, text illust.
- Rooseboom, M. (1).** Christiaan Huygens et la microscopie. Arch. néerl. Zool. 13 Suppl. 1 1958 [1959] : 59-73 5 figs.
- Rooseboom, M. (2).** Antoni van Leeuwenhoek ou dans le milieu scientifique de son époque. Arch. int. Hist. Sci. 12 46 : 27-44.
- Rosa, H.** The comparative study of species and stocks of aquatic organisms. Proc. int. Congr. Zool. 15 : 1026-1028.
- Rosca, D. I., Kolassovits, H. & Wittenberger, C.** Recherches sur la présence de la cholinestérase chez quelques invertébrés de la Mer Noire. Stud. Cercet. Biol. Bucuresti 8 3-4 1957 : 403-407. [French, etc., summaries.]
- Rose, M.** Les larves du plancton. In Trégouboff, G. & Rose, M. Manuel de planctologie méditerranéenne. Paris (Centre National de la Recherche Scientifique) 1957. Vol. I: 485-510; Vol. II: pl. 157-191.
- Rose, M.** see Trégouboff, G.
- Rose, S. M.** Failure of survival of slowly growing members of a population. Science 129 : 1026.
- (Roskin, G. I.)** [Cytochemistry of leucocytes.] Adv. mod. Biol., Moscow 47 : 375-389. [In Russian.]
- Rosset, R.** La réserve zoologique et botanique de Camargue. Nature, Paris No. 3290 : 262-267 7 figs.
- Rossi, L.** Contributo allo studio della fauna di profondità vivente presso la Riviera ligure di Levante. Doriana 2 (92) 1958 : 1-13.
- (Rubalova, N. G.)** [The problem of hybridization of animals in the papers of Darwin and his contemporaries.] Trud. Inst. Estet. Tech. 23 4 : 3-41. [In Russian.]
- Rudnick, D.** Embryonic nutrition. Chicago (Chicago University Press) 1958 pp. xi + 113, text-figs.
- Ruiter, L. de.** Some remarks on problems of the ecology and evolution of mimicry. Arch. néerl. Zool. 13 Suppl. 1 1958 [1959] : 351-368, 1 fig.
- Rusconi, C.** Carlos Ameghino y la Expedición Al Chaco, 1885. Rev. Mus. Hist. nat. Mendoza 12 : 155-164 1 pl. 2 figs.
- Ruszkowski, J.** Attempt of standardisation of the Polish zoological nomenclature. Przegl. zool. 3 : 4-10. [In Polish.]
- Ryzhkov, W. L.** Differenzierung von Zytoplasma bei der Artenbildung. J. gen. Biol., Moscow 20 (1) : 16-22. [In Russian with German summary.]
- Sabine, J.** see Denton, D. A.

- Sacchi, C. F. (1).** Componenti storiche e fattori ambientali nelle fisionomie zoologiche della Sicilia. *Boll. Zool.* 24 1957 : 633-683 16 figs.
- Sacchi, C. F. (2).** Notizie ecologiche sul lago litoraneo di Patria (Napoli-Caserta). *Proc. int. Congr. Zool.* 15 : 262-263.
- Søsterdal, T. A. S.** A critical review of quantitative mitotic recordings in animal tissues with special reference to the central nervous system. *Årb. Univ. Bergen. Naturv. R.* 1958 10 : 1-20 2 figs.
- Sala de Castellarnau, P. I.** El embriólogo Rev. P. Jaime Pujiula, S. J. (1869-1958). *Brotéria. Sér. Cienc. nat.* 28 2-3 : 94-104 portr.
- Salti, M.** Aspetti biologici della vita coloniale. *Boll. Zool.* 24 1957 : 87-98.
- Salmon, J.** Contribution à la biologie des eaux saumâtres: Etude bionomique de la partie terminale de la rivière l'Île à Binic (Côtes-du-Nord). *Bull. Soc. sci. Bretagne* 34 1-2 : 81-126.
- Salomonsen, F.** see Frenchen, P.
- Samarasinghe, E. L.** see Weerakoon, A. C. J.
- Sandon, H.** The teaching of Zoology in Sudan. *Proc. int. Congr. Zool.* 15 : 91-92.
- Sandosham, A. A.** The evolution of parasites. *Abstr. Pap. Cent. & Bicent. Congr. Univ. Malaya* 1958 : 14.
- Savile, D. B. O.** Limited penetration of barriers as a factor in evolution. *Evolution* 13 : 333-343 1 fig.
- Sawaya, P.** The teaching of zoology. *Proc. int. Congr. Zool.* 15 : 86-89.
- Sawyers, M. G.** Focus on natural history. *Perspective* 1 1 : 15-27 15 figs.
- Scheer, G.** Contribution to a German reef-terminology. *Atoll res. Bull.* No. 69 : 1-4.
- Schiller, C. H. & others.** Instinctive behavior. London (Methuen & Co.) 1957, pp. xix + 328, text illust.
- Schinz, H. R.** Erbmasse und ionisierende Strahlung. *Verh. schweiz. naturf. Ges.* 138 1958 : 27-61 23 figs.
- Schlieper, C.** New observations on the physiology of ciliated cells. *Proc. int. Congr. Zool.* 15 : 542-547 4 figs.
- Schmalhausen, I. I. (1).** Control and regulation in evolution. *Bull. Soc. Nat. Moscou Sér. Biol.* 63 5 1958 : 93-121. [English summary.]
- Schmalhausen, I. I. (2).** Concerning monophyletism and polyphyletism in relation to the problem of the origin of land vertebrates. *Bull. Soc. Nat. Moscou Sér. Biol.* 64 4 : 15-33 14 figs.
- Schmalhausen, I. I. (3).** Stabilizing selection. *Proc. int. Congr. Zool.* 15 : 131-133.
- Schmalhausen, I. I. (4).** Prospects of application of exact methods to the investigation of the evolution factors. *Vestn. Leningr. Univ.* No. 9 : 108-118. [English summary.]
- Schmidt, G. A.** Natural selection as a general and non-specific factor of evolutionary progress. *Bull. Acad. Sci. Moscou Sér. Biol.* No. 6 : 879-888. [English summary.]
- Schmitt, W. L.** Narrative of the 1958 Smithsonian-Bredin Caribbean Expedition. *Rep. Smithson. Instn.* 1958 : 419-430 10 pls.
- Schmitz, E. H.** Seasonal biotic events in two Colorado alpine tundra ponds. *Amer. midl. Nat.* 61 2 : 424-446 11 figs.
- Schneirla, J. C. (1).** Interrelationships of the "innate" and the "acquired" in instinctive behaviour. *Instinct, Paris* 1956 : 387-452 1 fig.
- Schneirla, J. C. (2).** The study of animal behaviour: I. *Curator* 1 4 1958 : 17-35 4 figs.
- Schneirla, J. C. (3).** The study of animal behaviour: Its history and relation to the museum. II. *Curator* 2 1 : 27-48 6 figs.
- Schöne, H.** Die Lageorientierung mit Statolithenorganen und Augen. *Ergebn. Biol.* 21 : 161-209 5 figs.
- Schönfeld, C.** Experimental confirmation of the theory of evolution (Echinodermata) as an object for the study of developmental processes. *Prirada* 5 : 56-61 figs. [In Russian, translated from German.]
- Schwabe, G. H.** see Illies, J.
- Schwarz, W.** Elektronenmikroskopische Untersuchungen an Schenfibrillen verschiedener Wirbeltiere., *Z. Zellf.* 48 3 1958 : 309-323 9 figs. [not seen.]
- Scott, H.** Biographical research in High Simien (northern Ethiopia) 1952-53. *Proc. Linn. Soc. Lond.* 170 1 1958 : 1-91 17 pls. 6 figs. map.
- Searle, A. G.** The genetics and evolution of threshold characters. *Abstr. Pap. Cent. & Bicent. Congr. Univ. Malaya* 1958 : 39-40.
- Sebestyén, O.** Studie über das organische Sediment im Erosionslitoral des Balatonsees. *Arch. Hydrobiol.* 55 : 371-391 2 figs.
- Sembrat, K. (1).** Gustaw Poluszyński (15.ix.1887—12.II.1959). *Przegl. Zool.* 3 : 161-171 1 pi.
- Sembrat, K. (2).** Hormones and evolution. *Proc. int. Congr. Zool.* 15 : 529-531.
- Semenov, D. I.** [Complexons in biology and medicine]. *Prirada* 8 : 25-32 3 graphs. [In Russian.]
- Șerbănescu, O.** The action of the 1957-1958 winter frost on the coast fauna in the Rumanian waters of the Black Sea. *Natura, București* 11 5 : 133-136.
- Serra, J. A. (1).** Some apparently "Lysenkoan" aspects of modern genetics. *Rev. portug. Zool.* 1 (4) 1958 : 331-362.
- Serra, J. A. (2).** A simple derivation of the equation of relative growth. *Rev. portug. Zool.* 1 (4) 1958 : 303-310.
- Serra, J. A. (3).** Stastical maturo of the gene. *Portug. Acta biol.* 5A 3-4 1958 : 210-212.
- Serra, J. A. (4).** Types of mutations. *Portug. Acta biol.* 5A 3-4 1958 : 206-209.
- Serventy, D. L.** Fauna conservation in Australia and conservation in Australian controlled New Guinea. *Proc. 9th Pacif. sci. Congr.* 7 : 5-10.
- Setyodiwiryo, K.** Nature protection in Indonesia. *Proc. 9th Pacif. sci. Congr.* 7 : 18-20.
- (Severin, S. E.)** [Formation and utilization of the energetically rich phosphorous compounds in the muscular forme in the normal and in some pathological states.] *Adv. mod. Biol., Moscow* 48 : 123-135 17 pp. [In Russian.]
- Shapiro, I. M.** see Graevski, E. Y.
- (Shaposhnikov, L. K.)** [Nature conservancy in the Urals]. *Vestn. Akad. Nauk SSSR* 1 : 143-144. [In Russian.]
- Sharov, A. G.** Evolution as the process of ontogeny alteration. *Proc. int. Congr. Zool.* 15 : 105-108 2 figs.



- Sharpless, S.** The role of the reticular formation of the brain stem in influencing sense perception. *Proc. int. Congr. Zool.* 15 : 884-887.
- Shecherbakov, A. P.** A modification of the apparatus of Lyadinovitch for quantitative estimates of microfauna in aquatic vegetation. *Trud. Vses. Ghidrobiol. Obshch.* 9 : 387-390.
- Shell, E. W. jr.** see Gunter, G.
- Shelswell, E. M.** see Boyden, A.
- (Shifman, L.)** [Endzehei Snyadetzkiĭ—a Polish naturalist and materialist.] *Trud. Inst. Estest. Tech.* 23 : 144-177. [In Russian.]
- (Shik, L. L.)** [IX All Soviet Meeting of physiologists, Biochemists and Pharmacologists.] *Priroda* 10 : 57-59. [In Russian.]
- (Shikhobalova, N. P. & Isakova, O. V.)** Konstantin Ivanovich Skryabin [Bibliography arranged by O. I. Isakovoĭ]. *Mater. biobibl. Uchen. SSSR (Biol.-Ghel'mint.)* Up. 2 : pp. 100, frontis. [In Russian.]
- (Shorm, F.)** [The ways of the development of the organic chemistry.] *Vestn. Acad. Sci. URSS* 7 : 12-16. [In Russian.]
- (Shreder, V. N.)** [On the activity of phosphatase and on nucleic acids in the leucostary serums.] *Trud. Inst. Morf. Zhiv.* 26 : 110-125 4 figs. [In Russian.]
- Sidorenko, P.** Meetings of the Department of Biology of the Ukraine Academy of Science. *Visnik Acad. Nauk Ukr. SSR* 6 : 57-61. [In Ukrainian.]
- Sills, B. & Couzyn, S.** Dry preservation of biologic specimens by plastic infiltration. *Curator* 1 4 1958 : 72-75 5 figs.
- Simonetta, A. M.** On the distribution and significance of the paratympanic organ. *Proc. int. Congr. Zool.* 15 : 415-419.
- Sirks, M. J.** Lamarck en Darwin, 1809-1859-1959. *Natuurw. Tijdschr.* 41 2-3 : 49-73 4 figs. [Not seen.]
- Sissakian, N. M.** Sur les travaux de l'Institut de Biochimie A. N. Bach. *Année Biol.* (3) 35 1-2 : 43-67.
- Sissakian, N. M. & Filippovich, I. I.** Protein synthesis and cell structure. *Bull. Acad. Sci. Moscou. Sci. Biol.* No. 6 : 839-854. [English summary.]
- Sjöstrand, F. S.** The ultrastructure of the retinal receptors of the vertebrate eye. *Ergebn. Biol.* 21 : 128-160 15 figs.
- Skalagne, V. N.** The tasks of wild-life management and hunting in the light of the resolutions adopted by the XXI Congress of the Communist Party of the Soviet Union. *Zool. Zh.* 38 : 1121-1127.
- (Skarlato, O. A.)** [Original mode of catching octopus in the Yellow Sea.] *Priroda* 9 112 fig. [In Russian.]
- Skuratowicz, W. & Urbański, J.** The forest reservation on Bukowa Góra near Zwierzyniec (Lublin Voivodeship) and its fauna. *Ochr. Przyr.* 21 1953 : 193-216 11 figs. [English summary.]
- Slevin, J. R.** The Galapagos Islands. A history of their exploration. *Occas. Pap. Calif. Acad. Sci.* No. 25 : 1-150 31 figs.
- (Slonim, A. D.)** [Chemical thermoregulation in ontogenesis, and in the adult animal.] *Adv. mod. Biol., Moscow* 47 : 220-234. [In Russian.]
- Smilk, H. M.** The synthetic natural populational species in biology. *Syst. Zool.* 7 1958 : 116-119.
- Smirnov, E. S.** [Homology and Taxonomy.] *Trud. Inst. Morf. Zhiv.* 27 : 68-78 9 figs. [In Russian.]
- Smirnov, M. S.** see Bongard, M. M.
- Smissaert, H. R.** Limburgse beken I. Faunistisch, oriëntierend-ecologisch. *Natuurh. Maandbl. Limburg* 48 1-4 : 7-18 35-46 70-78.
- Smit, P.** On the fundamentals of Darwin's theory. *Arch. néerl. Zool.* 13 Suppl. 1 1958 [1959] : 28-43.
- Smith, R. C.** Guide to the literature of the zoological sciences. Minneapolis (Burgess Publishing Co.) 1958. Fifth edition pp. xi, 203.
- Smythe, R. H.** How animals talk. London (Country Life Ltd.) pp. 109, text illust.
- (Sokolov, V. S.)** [IIIrd Conference of the British Society of Experimental Biology.] *Vest. Akad. Nauk SSSR* 5 : 126-127. [In Russian.]
- Sokol'skaia, A. V.** see Elpiner, I. E.
- Soldatkin, E. I.** Hunting ground aerial survey in the U.S.A. and Canada. *Priroda* 4 : 106-108 2 figs. [In Russian.]
- Solomon, M. E.** The meaning of density-dependence and related concepts. *Proc. int. Congr. Zool.* 15 : 784-787.
- Soot-Ryen, T.** Plans for a "Marine invertebrate fauna of Scandinavia." *Proc. int. Congr. Zool.* 15 : 272-274.
- Sotelo, J. R. & Trujillo-Cenóz, O.** Electron microscope study of the kinetic apparatus in animal sperm cells. *Z. Zellf.* 48 1958 : 565-601 35 figs. [Not seen.]
- Sourie, R.** Etude écologique sommaire des fonds sableux en Baie de Dakar. *Ann. Écol. supér. Sci. Dakar* 1 1954 : 141-155.
- Spooner, G. M.** New members of the British marine bottom fauna. *Nature, Lond.* 183 : 1695-1696.
- Sprankel, H.** Beiträge zur Entwicklungsgeschichte der praechordalen Region. *Verh. dtsh. zool. Ges.* 1958 [1959] : 406-418 13 figs.
- Spurway, H.** Breathing behaviour in aquatic vertebrates. *Abstr. Pap. Cent. & Bicent. Congr. Univ. Malaya* 1958 : 33-34.
- Spurway, H. & Kumar, A.** On variation under domestication. *Abstr. Pap. Cent. & Bicent. Congr. Univ. Malaya* 1958 : 40-42.
- Stammer, H. J.** "Trends" in der Phylogenie der Tiere; Ektogenese und Autogenese. *Zool. Anz.* 162 (7-8) : 187-208 8 figs.
- Stanley, J. A.** A programmed variable controlling device for temperature and relative humidity in laboratory cabinets. *Proc. int. Congr. Zool.* 15 : 768.
- Starrett, A.** What is the subspecies problem? *Syst. Zool.* 7 1958 : 111-115.
- Stasny, R.** Barcelona gründet einen Zoo. *Kosmos, Stuttgart* 55 10 : 409-414 10 figs.
- Stauffer, R. C.** "On the Origin of Species": A unpublished version. *Journal* 130 : 1449-1452 portr.
- Steadman, J. M.** Chauntecleer and medieval natural history. *Isis* 50 : 236-244.
- Stearn, W. T.** The background of Linnaeus's contributions to the nomenclature and methods of systematic biology. *Syst. Zool.* 8 (1) [1960] : 4-22 6 figs.
- Stebbins, G. L.** The role of hybridization in evolution. *Proc. Amer. phil. Soc.* 103 : 231-251 7 figs.

- Stefanelli, A. I movimenti cellulari nella morfogenesi. *Boll. Zool.* **24** 1957 : 427-449 9 figs.
- Stein, W. D. The transfer mechanism in active transport. *Proc. int. Congr. Zool.* **15** : 735-737.
- Steinböck, O. Fragmenta limnologica alpina. *Schlern-Schr.* No. 188 1958 : 113-144 7 pls.
- Steinitz, H. *see* Oren, O. H.
- Stelmasiak, M. [Polish anatomical nomenclature.] *Folia Morph. Warszawa* **9** (1) 1958 : 81-87.
- Stephenson, T. A. Coral reefs regarded as seashores. *Proc. int. Congr. Zool.* **15** : 244-246.
- Stęślicka, W. The problem of anthropogenesis in the works of Charles Darwin. *Przegl. zool.* **3** : 81-84 1 pl. [In Polish.]
- Steven, D. M. Marine laboratories in the Caribbean. *Proc. int. Congr. Zool.* **15** : 274-275.
- Stock, J. H. *see* Engel, H.
- Stoina, T. and others. Contribuții la cunoașterea influenței apelor Dunării asupra chimismului bălților deltei și în consecință asupra puterii de producție. *Bul. Inst. cercet. Pisc. Roman.* **18** (3) : 25-42, 11 figs. [French summary.]
- Strom, A. A. Fauna preservation faces a crucial period. *Aust. Mus. Mag.* **13** 1 : 9-12 figs.
- Stonditski, A. N. Méthodes de transplantation du tissu musculaire chez les Vertébrés supérieurs. *Bull. Soc. sci. Bretagne* **34** : 394-401 6 figs.
- Strashun, I. D. Charles Darwin and the Moscow Society of Naturalists. *Bull. Soc. Nat. Moscou Sér. Biol.* **64** 4 : 53-60 4 figs.
- Strauss, W. L. jr. *see* Glass, B.
- Stresemann, E. (1). Briefe von und über Eduard Eversmann aus den Jahren 1816-1822. *Mitt. zool. Mus. Berl.* **34** (2) 1958 : 221-243.
- Stresemann, E. (2). An eminent German naturalist (On the 100th anniversary of the death of A. Humboldt.) *Priroda* **5** : 62-66 port. [In Russian.]
- Striegel, S. Evocación del Barón Alexander von Humboldt. *Rev. Acad. colomb.* **10** 47 : xli-xlii.
- Struik, D. J. American science between 1780 and 1830. *Science* **129** : 1101-1106 6 figs.
- Studitsky, A. N. Experimental morphology of muscular tissue and the theory of animal development. *Proc. int. Congr. Zool.* **15** : 723-725.
- Suarez-Castro, J. A. (1) Investigaciones sobre el plancton marino de Cuba. *Monogr. Lab. Biol. mar., Habana Monogr.* **1** 1957 : 1-14.
- Suarez-Castro, J. A. (2) Salinidad, temperatura y plancton de las aguas costeras de Isla de Pinos. *Monogr. Lab. Biol. mar., Habana Monogr.* **7** : 7-25 7 figs.
- Suščenka L. M. *see* Vinberg G. G.
- Svetlov, P. G. Substitution in function of embryonic layers. *Trud. Inst. Morf. Zhiv.* **27** : 26-40. [In Russian.]
- Swami, K. S. Observations on the ecology of some tropical inter-tidal rock pools. *J. biol. Sci., Bombay* **2** 1 : 26-33.
- Swedmark, B. On the biology of sexual reproduction of the interstitial fauna of marine sand. *Proc. int. Congr. Zool.* **15** : 327-330.
- Sweetman, H. L. The principles of biological control. *Dubuque, Iowa* 1958 : i-xii, 1-560 328 figs.
- Swinton, W. E. The display of evolution. *Mus. J., Lond.* **59** 8 : 184-186 1 fig.
- Sylwanowicz, W. [Advances of macromorphology in the last ten years.] *Folia Morph. Warszawa* **9** (1) 1958 : 9-13.
- Syroechkovsky, E. E. The role of animals in primary soil formation under the conditions of pre-polar region of the globe (examplified by the Antarctic). *Zool. Zh.* **38** : 1770-1775 3 figs.
- Sytko, P. O. Controlled (bioantropical selection). *J. gen. Biol., Moscow* **20** 5 : 398-404. [English summary.]
- Talbot, G. B. Research facilities of the United States Fishery Laboratory, Beaufort, North Carolina. *Circ. U.S. Fish. Wildl. Serv.* No. 54.
- Tanner, V. M. Carl Linnaeus' contributions and collections. *Gt. Britain Nat.* **19** 1 : 27-35 portr.
- Tatum, E. L. A case history in biological research. *Science* **129** : 1711-1715.
- Taylor, C. C. & others. Climatic trends and the distribution of marine animals in New England. *Fish. Bull. U.S.* **57** (116) 1957 : 293-345 29 figs.
- Taylor, F. H. *see* Davies, J. T.
- Taylor, W. K. Flying-spot microscopy. *Proc. int. Congr. Zool.* **15** : 734-735.
- Teissier, G. Détermination *a posteriori* de la grandeur de référence dans l'étude des phénomènes d'allométrie. *Proc. int. Congr. Zool.* **15** : 631-633.
- Tembrock, G. Zur Geschichte der Zoologie in Berlin. *Wiss. Z. Humboldt-Univ. Berlin. Math.-Nat. R.* **8** 2 : 185-196.
- Temkin, O. *see* Glass, B.
- Teorell, T. On the significance of "voltage clamp" data in the "membrane oscillator." *Biol. Bull. Woods Hole* **117** (2) : 401.
- Tarasov, N. I. Marine fouling of ships and hydro-technical constructions on the sea shores of the U.S.S.R. *Zool. Zh.* **38** : 1886-1887.
- Terra, H. de. Alexander von Humboldt's correspondence with Jefferson, Madison and Gallatin. *Proc. Amer. phil. Soc.* **103** : 783-806.
- Thierfelder, F. Zur Geschichte des Altenburger Naturkunde-Museums. *Abh. Ber. naturk. Mus. Altenburg* **1** 1958 : 7-14 4 pls.
- Thoday, J. M. Effects of disruptive selection. *Proc. int. Congr. Zool.* **15** : 127-130 1 fig.
- Thoday, J. M. & Boam, T. B. Effects of disruptive selection, I-II. *Heredity* **13** 2 : 187-218 6 figs.
- Thomas, E. A. *see* Järnefelt, H.
- Thomas, E. A. Versuche mit Plankton-Test-Loten im Baldeggsee. Erster Teil, vom 19 März bis 13 Mai 1958. *Vjschr. naturf. Ges. Zürich* **104** Festschr. Steiner : 330-340.
- Thornton, C. S. [& others]. Regeneration in vertebrates. *Chicago, Ill.* (Univ. Chicago Press) : pp. xi, 108; text figs.
- Thorson, G. The influence of larval settlement upon the composition of marine level bottom communities. *Proc. 8th Pac. Sci. Congr.* **3A** 1957 : 1171-1176.
- Thurber, D. C. *see* Newell, N. D.
- Tokin, B. P. The immunity of embryos—a problem of comparative embryology and of general zoology. *Proc. int. Congr. Zool.* **15** : 583-585.

- Tomiyaama, T. & Oyama, S.** A practical assay method for determination of tetracycline and oxytetracycline in tissues. *Bull. jap. Soc. Sci. Fish.* **25** (3) 228-233 1 fig.
- Toombs, H. A. & Rixon, A. E.** The use of acids in the preparation of vertebrate fossils. *Curator* **2** 4: 304-312 3 figs.
- Törő, I.** Differentiation and dedifferentiation of cellular structure and function. *J. gen. Biol., Moscow* **20** 3: 174-183.
- Törő, I. & Pósalaky, Z.** Beiträge zur Struktur des Spermiumkopfes. *Verh. anat. Ges. Jena* **55** 1958 [1959]: 319-324 2 figs.
- Tortonese, E. (1).** La moderna sistemática e il preformismo nella evoluzione organica. *Boll. Zool.* **24** 1957: 705-723.
- Tortonese, E. (2).** Osservazione sul Benthos del mar di Marmara e del Bosforo. *Natura, Milano* **50** 1: 18-26 2 figs.
- Travassos, L. & Kloss, G. R.** Relatório da excursão do Instituto Oswaldo Cruz e Museu Nacional a Belém-Pará, de dois a dezessete de Março de mil novecentos e cinquenta e oito. *Bol. Mus. Goeldi (Zool.)* No. 15 1958: 1-19 1 pl.
- Trégouboff, G. (1).** Prospections biologiques sous-marines dans la région de Villefranche-sur-Mer au cours de l'année 1957. I. Plongées en bathyscaphe. *Bull. Inst. océanogr. Monaco* No. 1117 1958: 1-37 6 figs.
- Trégouboff, G. (2).** Le Bathyscaphe au service de la planctonologie. *Ann. Inst. océanogr. Paris N.S.* **35** 1958: 327-341.
- Trégouboff, G. & Rose, M.** Manuel de planctonologie méditerranéenne. Paris (Centre National de la Recherche Scientifique) 1957. 2 vols.
- Trevor, J. C.** Carlos Darwin. *Rev. Acad. colomb.* **10** 41: lxxix-lxxx.
- Troshin, D. M.** The Philosophical basis of modern natural science (on the 50th anniversary of the publication of W. I. Lenin's "Materialism and Empirio-criticism.") *Priroda* **5** 3-10. [In Russian.]
- Troshin, D. M.** see Chesnokov, E. N.
- Trowell, O. A. & Westgarth, D. R.** A method for differential cell counting in certain organs. *Anat. Rec.* **134**: 463-471.
- Trujillo-Cenóz, O.** see Sotelo, J. R.
- Tucker, R.** Taxonomy of the salivary glands of vertebrates. *Syst. Zool.* **7** 1958: 74-83.
- Turrill, W. B.** Joseph Dalton Hooker, F.R.S. (1817-1911). *Notes & Rec. roy. Soc. Lond.* **14** 1: 109-120 1 pl.
- Tuxen, S. L.** Der Entomologe I.C. Fabricius und die Typen der von ihm beschriebenen Arten. *Zool. Anz.* **163**: 343-350.
- (Tyutenkov, S. K.)** [Benthos of the lake Balkhash, and its importance from the fish-food point of view.] *Shorn. Rabot. Ikhtiol. gidrobiol.* **2**: 45-79 2 figs. [In Russian.]
- Udvardy, M. F. D.** Notes on the ecological concepts of habitat, biotope and niche. *Ecology* **40**: 725-728.
- Ulberg, L. C.** The influence of high temperature on reproduction. *J. Hered.* **49** 2 1958: 62-64. [Not seen.]
- Urasov, I. G. R.** Virchow's "Cellular Pathology" and its significance for the history of cellular theory. (The 100th anniversary of the publication). *Vestn. Leningr. Univ.* No. 21: 106-115.
- Urbański, J.** see Skuratowicz, W.
- Ushakov, P. V.** Invertebrates of the bottom fauna of the Far Eastern seas of the USSR. *Proc. 9th Pacif. sci. Congr.* **16** 1958: 210-216.
- Ushakov, B. P.** Heat resistance of tissues as a specific character of poikilothermic animals. *Zool. Zh.* **38**: 1292-1302 5 figs.
- Usinger, R. L.** see Linsley, E. G.
- Uvarov, B. P.** Prof. F. S. Bodenheimer. *Nature, Lond.* **184**: 937-938.
- Vaart, H. R. van der.** Some remarks on the application of engineering science to biology. *Arch. néerl. Zool.* **13** Suppl. 1 1958 [1959]: 146-166.
- Vaisey, C. N.** A visit to some European zoos. *Rep. Wildf. Tr. No.* **10** 1957-58 1959: 151-161.
- Vandel, A.** Réflexions sur la notion d'espèce et sa signification. *C.R. Acad. Sci., Paris* **249** 5: 593-598.
- Vandel, A. & Matsakis, J.** Sur l'application des méthodes biométriques à la recherche des affinités entre groupes zoologiques. *C.R. Acad. Sci., Paris* **248** 3: 336-340.
- Vanmicci, M.** A nova sistemática e a planctonologia. *Bol. Inst. océanogr. S. Paulo* **3** 1-2 1957: 217-223.
- Varga, E.** Über die cholinesterase-Aktivität des kontraktiven Eiweißstoffes (Eigenschaften und physiologische Rolle.) *J. Gen. Biol. Moscow* **20** (1): 3-15. [In Russian with German summary.]
- Vártenés, V.** Methods and recent results of radio-biology. *Acta biol. hung. Suppl.* No. 3: 12.
- Vatova, A.** Die Benthosfauna in den Zuchtgebieten für Seefische der Nordwestlichen Adria. *Proc. int. Congr. Zool.* **15**: 1053-1055.
- Vaughan, R. E.** Nature reserves in Mauritius. *C.R. 3rd Congr. Ass. Sci. Pays. Océan Indian. Sect. B.* 1957: 125-131 3 figs. map.
- (Vereshchagin, N. K.)** [Zoogeographical division of the Caucasian isthmus.] *Zhivot. Mir* **5** 1958: 506-514. [In Russian.]
- Verwey, J.** Orientation in migrating marine animals and a comparison with that of other migrants. *Arch. néerl. Zool.* **13** Suppl. 1 1958 [1959]: 418-445.
- Veselov, E. A. (1).** [Methods of the investigations of the gas exchange in fish and in the aquatic invertebrates.] Pavlovski, E. N., Zhadin, V. I., Life of the freshwaters of the U.S.S.R. **4** Pt. 2: 79-124 35 figs. [In Russian.]
- Veselov, E. A. (2).** [Methods in the investigation of osmoregulation of fish and of the aquatic invertebrates.] Pavlovski, E. N. & Zhadin, V. I., Life of the freshwaters of the U.S.S.R. **4** Pt. 2: 125-176 36 figs. [In Russian.]
- Vevers, H. G.** see Ashton, E. H.
- (Vialli, M. & Romanini, M. G. M.)** Simposio di istochimica. *Boll. Zool.* **24** 1957: 527-546-564.
- Viand, G.** Taxies et tropismes dans le comportement instinctif. *Instinct, Paris* 1956: 6-49 4 figs.
- Vickers, G. G.** A graphical model relating to theories of population regulation. *Proc. int. Congr. Zool.* **15**: 790-793 2 figs.
- (Vilisova, I. K.) (1).** [Contribution to the knowledge of microbenthos of Baikal Sea.] *Trav. Baik. Limn. Sta* **17**: 305-312. [In Russian.]

- (Vilisova, I. K.) (2). [Zooplankton of the Baikal Sea.] Trav. Baik. Limn. Sta. 17 : 275-304 12 figs. [In Russian.]
- Villegas, A. N. Humboldt y las ciencias naturales. Rev. Acad. colomb. 10 41 : xxxvii-xxxix.
- (Vinberg, G. G., Liakhovich, V. P. & Suschenia, L. M.) Biological investigations in the inland water basins of Poland. Priroda 4 : 73-76 4 figs. [In Russian.]
- Vinogradov, M. E. (1). Über die quantitative Verbreitung des Tiefseepanktons im nordwestlichen Teil des Stillen Ozeans. Int. Rev. Hydrobiol. 44 2 : 217-225 3 figs.
- Vinogradov, M. E. (2). On the vertical distribution of deep-sea plankton in the west part of the Pacific Ocean. Proc. int. Congr. Zool. 15 : 223-225.
- Virketis, M. A. & Jadina, T. G. On the zooplankton of the North-Kuril waters. Trud. Inst. Okean. 36 : 230-235 3 figs. [In Russian.]
- Vlastov, B. V. "Pelon" as a special kind of coenoses, its occurrence and place in the system of coenoses. Trud. Vses. Ghidrobiol. Obshch. 9 : 129-160 5 figs.
- Vollman, R. F. Carl G. Hartman's contributions to the physiology of reproduction. Experientia 15 10 : 407-408 portr.
- Voous, K. H. De zoölogische betekenissen van et Krugerpark. Vakbl. Biol. 39 11 : 197-209.
- Voronina, N. M. Horizontal distribution of zooplankton in the northern part of the Ribinsk reservoir. Trud. Vses. Ghidrobiol. Obschh. 9 : 249-278 5 figs.
- (Vunder, P. A.). [Some problems in the physiology of the secretion of the thyroid hormone.] Adv. mod. Biol., Moscow 48 : 233-238. [In Russian.]
- Waddington, C. H. (1). The strategy of the genes. London, 1957 : i-ix, 1-262 figs.
- Waddington, C. H. (2). The biophysics of animal form. New Biol. No. 30 : 112-119 6 figs.
- Wagner, R. P. Molecular configuration, synthesis and gene action. Univ. Tex. Publ. No. 5914 : 261-271.
- Walford, L. A. Living resources of the sea. N.Y. 1958 : i-xv, 1-321 23 maps.
- Wallraff, J. Obituary—Wilhelm Blotvogel. Anat. Anz. 107 (1-5) : 92-96 1 fig.
- Walmsley, V. G. see Holland, C. H.
- Waring, H. see Fraser, A. J.
- Waterman, T. H. The problem of polarized light sensitivity. Proc. int. Congr. Zool. 15 : 537-539.
- Watterson, G. A. see Moran, P. A. P.
- Weaver, R. A. & others. Game water development on the desert. Calif. Fish. Game 45 (4) : 333-342 7 figs.
- Webb, J. E. The teaching of zoology in Nigeria. Proc. int. Congr. Zool. 15 : 89-91.
- Weerekson, A. C. J. & Samarasinghe, E. L. Meso-fauna of the soil of a paddy-field in Ceylon. Preliminary survey. Ceylon J. Sci. Biol. Sci. 12 1958 : 155-170.
- Wellman, H. W. Divisions of the New Zealand Cretaceous. Trans. roy. Soc. N.Z. 87 1-2 : 99-163 3 pls. 20 figs.
- Westgarth, D. R. see Trowell, O. A.
- Westlake, D. F. The effects of organisms on pollution. Proc. Linn. Soc. Lond. 170 2 : 171-172.
- Wetzel, O. New problematic microfossils from the German Upper Lias. Proc. int. Congr. Zool. 15 : 1060.
- Whittaker, R. H. On the broad classification of organisms. Quart. Rev. Biol. 34 : 210-226 2 figs.
- Wieser, W. & Kanwisher, J. Respiration and anaerobic survival in some sea weed-inhabiting invertebrates. Biol., Bull. Woods Hole 117 : 594-600 3 figs.
- Wigglesworth, V. B. A simple method for cutting sections in the 0.5 to 1  $\mu$  range, and for sections of chitin. Quart. J. micr. Sci. 100 : 315-320 2 figs.
- Wilczyński, J. Z. On the presumed Darwinism of Alberuni eight hundred years before Darwin. Isis 50 : 459-466.
- Wilhelm, O. Historia de la Sociedad de Biología de Concepción. (Fundada el 30 de Abril de 1927). Bol. Soc. biol. Concepción 33 : 3-9.
- Williamson, M. H. Selection, controlling factors and polymorphism. Amer. Nat. 92 : 329-335.
- Wilson, G. B. see Morrison, J. H.
- Witschi, E. Etudes comparatives sur les hormones sexuelles chez les vertébrés. Bull. Soc. zool. Fr. 84 (4) : 244-258.
- Witschi, E. Age of sex-determining mechanisms in vertebrates. Science 130 : 372-375 1 fig.
- Wittenberger, K. Über den physiologischen Aspekt der Evolution. Acta Biotheor. 13 2-3 : 87-106.
- Wittenberger, C. see Rosca, D. I.
- Woitov, V. I. see Ponomareva, L. A.
- Wolff, T. (1). La faune hadale ou faune des profondeurs supérieures a 6000-7000 metres. Terre et la Vie 106 : 244-266 1 pl. 4 figs.
- Wolff, T. (2). L'exploration des mers profondes. Nature, Paris No. 3294 : 425-431 9 figs.
- Wolf-Heidegger, G. & Klinger, H. P. Zur Frage der Darstellung des Geschlechtschromatins bei Mollusken, Amphibien und Magern. Verh. anat. Ges. Jena 55 1958 [1959] : 17-20.
- Wolvekamp, H. P. "Free Life" in relation to size and to structural and functional patterns. Arch. néerl. Zool. 13 Suppl. 1 1958 [1959] : 44-58.
- Wood, E. J. F. & Allen, F. E. Common marine fouling organisms of Australian waters. Melbourne (Navy Office) 1958 pp. 23 24 pls.
- Woodmansee, R. A. The seasonal distribution of the zooplankton off Chicken Key in Biscayne Bay, Florida. Ecology 39 1958 : 247-262 8 figs.
- Worthington, E. B. Earth, air, fire and water: the "elements" of conservation. Proc. int. Congr. Zool. 15 : 61-62.
- Woynárovich, E. Oxygen consumption of aquatic animals at various temperatures. Acta biol. hung. Suppl. No. No. 3 : 18.
- Wright, S. Genetics, the gene, and the hierarchy of biological sciences. Proc. 10th internat. Congr. Genetics 1 : 475-489.
- Wrzosek, A. [The teaching of histology at the Faculty of Medicine at the Jagiellonian University in the XIX century.] Folia Morph. Warszawa 9 (2) 1958 : 161-163.
- (Yakovlev, V. G. & Govorov, G. G.) [A pneumatic autojector.] Izv. Akad. Nauk. Kirgiz SSR Biol. 1 : 151-153 fig. [In Russian.]

Yamashina, Y. Conservation in Japan. Proc. 9th Pacif. sci. Congr. 7: 21.

Yanovskaya, G. Y. see Mordukhai-Boltovskoi, F. D.

Yoffey, J. M. The lymphocyte problem. Nature, Lond. 183: 76-78.

Young, D. A. jr. On lectotype proposals. Syst. Zool. 7 1958: 120-122.

Young, J. Z. Information theory in relation to cell biology. Proc. int. Congr. Zool. 15: 726-727.

(Yurkevich, I. D. & Kupchinov, M. M. Scientific achievements of the academicians and members of the Belorussian Academy of Science from the initiation of its biological sciences. Vestzi Akad. Nauk. Beloruss SSR biol. 2: 128-134. [In Belorussian.]

Zafar, A. R. Taxonomy of lakes. Hydrobiologia 13: 287-288 1 fig.

Zaitzev, V. P. [In the U-boat "Severnnyak."]. Priroda 8: 71-76. [In Russian.]

Zakhidov, T. Z. Ecological survey of the vertebrate fauna in the Kyzylkum desert. Proc. int. Congr. Zool. 15: 773-775.

Zänkert, A. & L. Zoologische Gärten und Tierparke. 6. Das Georg-von-Opel-Freigehege für Tierforschung e.V. Kosmos, Stuttgart 55 3: 99-104 9 figs.

Zavattani, E. La facies biologia generale. R.C. Accad. nac. xl (4) 1954: 313-321.

Zenkevitch, L. A. (1). Study of abyssal bottom fauna in the northwest part of the Pacific by Vitiaz. Proc. 9th Pacif. sci. Congr. 16 1958: 209.

Zenkevitch, L. A. (2). Invertebrates of bottom fauna of the Far Eastern seas and adjacent part of the Pacific. Proc. 9th Pacif. sci. Congr. 16 1958: 208.

Zenkevitch, L. A. (3). Certain zoological problems connected with the study of the abyssal and ultra-abyssal zones on the ocean. Proc. int. Congr. Zool. 15: 215-218.

(Zhukov, P. I.) [I. M. Syazhanin (60th anniversary).] Vestn. Akad. Nauk. Beloruss. ser. Biol. 4 1958: 136-139 port. [In Belorussian.]

(Zhukov-Verezhnikov, N. N. & Petrov, R. V.). [Immunology of the growth, and of the development of the cells in tissue—a new Chapter in biology.] Adv. mod. Biol., Moscow 47 2: 235-254. [In Russian.]

Zhuraviev, M. V. see Derzhavin, A. N.

Zimmermann, A. Über die anatomische Nomenklatur. Allat. Közl. 45 3-4 1956: 159-171. [German summary.]

Zinn, D. J. The interstitial fauna of sand. Proc. int. Congr. Zool. 15: 317-319.

Zirkle, C. Species before Darwin. Proc. Amer. phil. Soc. 103: 636-644.

Zrazhevskii, A. I. [The rôle of certain invertebrates in the decomposition of organic substances and the increase in the fertility of the soils.] in Aleinikova, M. M. & others: All-Union conference on soil zoology. Summary of papers. Moscow 1958: 44-46.

Zweifach, B. W. & Kopac, M. J. Robert Chambers—pioneer in micromanipulation. Protoplasma 51 1: 154-162 portrait.

Zwilling, E. Micromelia as a direct effect of insulin—evidence from *in vitro* and *in vivo* experiments. J. Morph. 104 (1): 159-174 2 pls.

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Bibliography.—Heberer, G. (1); Georgi, J.; Boschma, H. (2); Beklemishev, V. N. (1); Bachmann, H. & Aumann, K.; Aliiev, G. A.; Lototski, B. V.; Zhukov, P. I.; Redier, L.; Murphy, R. C.; Mertens, R.; Meixner, A.; Macdonald, R. & McMillan, N.; Lorenz, K. (3).

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Bibliography.—Giese, E.; Costello, D. P.; Erman, L. M. & Gerasimova, M. A.; Deranujagala, P. E. P.; Charlesworth, J. K.; Brown, L.; Bourlière, F.; Anon (4); Smith, R. C.; Richards, A. F. & Brattstrom, B. H.; Reish, D. J. (1); Oren, O. H. & Steinitz, H.; Nauck, E. Th.; Markevich, A. P.

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